# PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

## Flint Ink North America Corporation 800 Industrial Blvd. New Albany, IN, 47150

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T043-7305-00012

Issued by:

Janet G. McCabe, Assistant Commissioner

Office of Air Quality

Issuance Date: June 5, 2001

Expiration Date: June 5, 2006

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#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary printing ink production plant.

Responsible Official: Duane Ness

Source Address: 800 Industrial Blvd., New Albany, IN, 47150 Mailing Address: 800 Industrial Blvd., New Albany, IN, 47150

Phone Number: 812-948-1586

SIC Code: 2893 County Location: Floyd

County Status: Nonattainment for Ozone

Attainment for all other criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under Emission Offset Rules; Major Source, Section 112 of the Clean Air Act

## A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) one (1) solvent tank farm, installed in 1974, and exhausting to the atmosphere, and consisting of:
  - (1) two (2) S series fixed roof dome tanks, identified as S1 and S2, each with a maximum capacity of 57,000 gallons of reclaim solvent;
  - one (1) S series fixed roof dome tank, identified as S3, with a maximum capacity of 27,000 gallons of reclaim solvent;
  - one (1) S series fixed roof dome tank, identified as S4, with a maximum capacity of 27,000 gallons of toluene;
  - one (1) S series fixed roof dome tank, identified as S5, with a maximum capacity of 22,800 gallons of roto solvent; and
  - (5) two (2) S series fixed roof dome tanks, identified as S6 and S7, each with a maximum capacity of 22,800 gallons of reclaim solvent.
- (b) one (1) raw material storage area, installed in 1974, exhausting to the atmosphere, and consisting of:
  - (1) four (4) V series fixed roof dome tanks, identified as V10-V13, each with a maximum capacity of 18,600 gallons of resin;
  - one (1) V series fixed roof tank, identified as V14, with a maximum capacity of 18,600 gallons of gilsonite slurry;
  - one (1) V series fixed roof dome tank, identified as V15, with a maximum capacity of 11,300 gallons of polyamide;
  - one (1) V series fixed roof dome tank, identified as V16, with a maximum capacity of 11,300 gallons of resin;
- (c) one (1) raw material storage area ("A" Department), installed in 1974, exhausting to the atmosphere, and consisting of:
  - (1) two (2) V series fixed roof dome tanks, identified as V17 and V18, each with a maximum capacity of 18,600 gallons of resin:

(2) two (2) V series fixed roof dome tanks, identified as V19 and V20, each with a maximum capacity of 18,600 gallons of clay;

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- (3) two (2) V series fixed roof dome tanks, identified as V21-V22, each with a maximum capacity of 18,600 gallons of Gilsonite; and
- one (1) V series fixed roof tank, identified as V23, with a maximum capacity of 18,600 gallons of resin.
- (d) one (1) holding tank operation (mill room) consisting of:
  - one (1) holding fixed roof tank, exhausting to the atmosphere, identified as HT20, installed in 1996, with a maximum capacity of 2,400 gallons of clay;
  - one (1) holding fixed roof tank, exhausting to the atmosphere, identified as HT21, installed in 1998, with a maximum capacity of 2,400 gallons of dispersant;
  - (3) two (2) holding fixed roof dome tanks, exhausting to the atmosphere, identified as HT23 and HT 24, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate;
  - (4) two (2) holding fixed roof tanks, exhausting to the atmosphere, identified as HT26 and HT28, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate: and
  - two (2) holding fixed roof dome tanks, exhausting to the atmosphere, identified as HT29 and HT30, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate.
- (e) one (1) premixing operation (mill room), installed in 1974, exhausting to the atmosphere, and consisting of:
  - one (1) Pre Mix series fixed roof tank, identified as PM20, with a maximum capacity of 2,200 gallons of clay;
  - one (1) Pre Mix series fixed roof tank, identified as PM21, with a maximum capacity of 2,200 gallons of clay and varnish;
  - one (1) Pre Mix series fixed roof tank, identified as PM22, with a maximum capacity of 1,500 gallons of gilsonite;
  - (4) two (2) Pre Mix series fixed roof tanks, identified as PM 23 and PM24, each with a maximum capacity of 1,500 gallons of concentrate;
  - (5) two (2) Pre Mix series fixed roof tanks, identified as PM 25 and PM 26, each with a maximum capacity of 1,500 gallons of concentrate; and
  - (6) two (2) Pre Mix series fixed roof tanks, identified as PM 27 and PM 28, each with a maximum capacity of 1,500 gallons of concentrate; and
  - (7) two (2) Pre Mix series fixed roof dome tanks, identified as PM29 and PM30, each with a maximum capacity of 1,500 gallons of concentrate.
- (f) one (1) blending operation, exhausting to the atmosphere, and consisting of:
  - (1) two (2) B series fixed roof dome tanks, installed in 1974, identified as B40 and B41, each with a maximum capacity of 5,100 gallons of ink;
  - three (3) B series fixed roof dome tanks, installed in 1974, identified as B42 through B44, each with a maximum capacity of 5,100 gallons of ink;
  - three (3) B series fixed roof dome tanks, installed in 1974, identified as B45 through B47, each with a maximum capacity of 5,100 gallons of ink; and
  - three (3) B series fixed roof dome tanks, installed in 1974, identified as B48 through B50, each with a maximum capacity of 5,100 gallons of ink.
- (g) one (1) "A" Department blending operation, exhausting to the atmosphere, and consisting of:
  - (1) four (4) B series fixed roof dome tanks, installed in 1977, identified as B51 through B54, each with a maximum capacity of 2,590 gallons of ink;
  - three (3) B series fixed roof dome tanks, installed in 1996, identified as B55 through B57, each with a maximum capacity of 5,700 gallons of ink; and
  - (3) three (3) B series fixed roof dome tanks, installed in 1996, identified as B58 through B60, each with a maximum capacity of 5,700 gallons of extender.

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- (h) one (1) "A" Department base storage area, exhausting to the atmosphere, and consisting of:
  - (1) seven (7) F series fixed roof dome tanks, installed in 1977, identified as F104-110, each with a maximum capacity of 5,100 gallons of concentrate.
- (i) one (1) finished ink storage area, exhausting to the atmosphere, and consisting of:
  - eighteen (18) F series fixed roof dome tanks, installed in 1974, identified as F61-78, each with a maximum capacity of 9,150 gallons of ink;
  - three (3) F series fixed roof dome tanks, installed in 1974, identified as F79-81, each with a maximum capacity of 9,150 gallons of extender; and
  - (3) four (4) F series fixed roof dome tanks, installed in 1974, identified as F82-85, each with a maximum capacity of 9,150 gallons of ink;
  - (4) two (2) F series fixed roof dome tanks, installed in 1974, identified as F86 and 87, each with a maximum capacity of 9,150 gallons of extender;
- (j) one (1) "A" Department finished ink storage area, exhausting to the atmosphere, and consisting of:
  - (1) sixteen (16) F series fixed roof dome tanks, installed in 1977, identified as F88-F103, each with a maximum capacity of 10,350 gallons of ink.
- (k) Loading racks for loading finished products and solvents, with a maximum capacity of 13,100 gallons per hour.
- (I) Building vents (HV-1 through HV-4 and FV-1 through FV-4, venting indoor VOCs from piping losses to the atmosphere.)

## A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
  - (1) four (4) air make up units exhausting to stacks HV-1 through HV-4,
  - two (2) #2 fuel oil and natural gas fired boilers, identified as Boiler #1 and Boiler #2, each rated at five (5) million British thermal units (mmBtu) per hour and exhausting at two (2) stacks, identified as B1 and B2. [326 IAC 6-2-4]
- (b) Activities or categories not previously identified with emissions less than or equal to insignificant thresholds
  - (1) Gilsonite Storage Silo Loading. [326 IAC 6-3-2]
  - (2) Handling of dry materials, with a maximum capacity of 2,000 pounds of dry materials per hour, utilizing a baghouse for particulate control.[326 IAC 6-3-2]
  - (3) Eleven (11) material handling operations, identified as Premix Collectors 20 through 30. [326 IAC 6-3-2]

#### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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**SECTION B** 

#### **GENERAL CONDITIONS**

#### Definitions [326 IAC 2-7-1] B.1

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

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#### B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

#### B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

#### **B.4** Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

#### B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect (a) information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information (b) that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

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(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA. The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

## B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

#### B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

#### B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

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United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
  - (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
    - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
    - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
    - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

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The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

#### B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile, to:

> Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

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- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

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The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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#### B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued operating permits are superceded by this permit.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

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This permit shield is not applicable to minor Part 70 permit modifications until after (h) IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

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#### B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

#### Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)] B.15

Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- A deviation is an exceedance of a permit limitation or a failure to comply with a (b) requirement of the permit or a rule. It does not include:
  - An excursion from compliance monitoring parameters as identified in Section D (1) of this permit unless tied to an applicable rule or limit; or
  - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

#### B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- This permit may be modified, reopened, revoked and reissued, or terminated for cause. (a) The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

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- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

#### B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
  - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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- Right to Operate After Application for Renewal [326 IAC 2-7-3] (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

#### B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- Any application requesting an amendment or modification of this permit shall be (b) submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

#### B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- No Part 70 permit revision shall be required under any approved economic incentives, (a) marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 (b) permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

#### Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5] B.20

- The Permittee may make any change or changes at the source that are described in 326 (a) IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act:
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

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(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a).

For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

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Alternative Operating Scenarios [326 IAC 2-7-20(d)] (d) The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

#### Source Modification Requirement [326 IAC 2] [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

#### Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] B.22

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a Part 70 source is located, or (a) emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- Have access to and copy, any records that must be kept under the conditions of this (b) permit:
- (c) Inspect, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- Sample or monitor, substances or parameters for the purpose of assuring compliance (d) with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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## B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

#### SECTION C

#### **SOURCE OPERATION CONDITIONS**

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#### **Entire Source**

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

## C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

## C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

#### C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

## C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

#### C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

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(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
  - (A) Asbestos removal or demolition start date;
  - (B) Removal or demolition contractor; or
  - (C) Waste disposal site.
- The Permittee shall ensure that the notice is postmarked or delivered according to the (c) guidelines set forth in 326 IAC 14-10-3(2).
- The notice to be submitted shall include the information enumerated in 326 IAC 14-10-(d) 3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- Procedures for Asbestos Emission Control (e) The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

#### Testing Requirements [326 IAC 2-7-6(1)]

#### Performance Testing [326 IAC 3-6] C.8

All testing shall be performed according to the provisions of 326 IAC 3-6 (Source (a) Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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Indiana Department of Environmental Management Compliance Data Section. Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

#### C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

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(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

## C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
  - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
  - (b) Whenever a condition in this permit requires the measurement of a flow rate the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
  - (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

## Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

#### C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP)

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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#### Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- For each compliance monitoring condition of this permit, reasonable response steps (b) shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- Upon investigation of a compliance monitoring excursion, the Permittee is excused from (c) taking further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.;
  - (3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

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- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any guarter.

Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

## C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C -Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
  - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
    - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

Flint Ink North America Corporation New Albany, Indiana

Permit Reviewer: PR/EVP

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

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(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

## C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015 Flint Ink North America Corporation New Albany, Indiana

Permit Reviewer: PR/EVP

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

## **Stratospheric Ozone Protection**

#### C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

**SECTION D.1** 

## **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

- one (1) solvent tank farm, installed in 1974, and exhausting to the atmosphere, and consisting of:
  - (1) two (2) S series fixed roof dome tanks, identified as S1 and S2, each with a maximum capacity of 57,000 gallons of reclaim solvent;

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- one (1) S series fixed roof dome tank, identified as S3, with a maximum capacity of 27,000 gallons of reclaim solvent;
- one (1) S series fixed roof dome tank, identified as S4, with a maximum capacity of 27,000 gallons of toluene;
- (4) one (1) S series fixed roof dome tank, identified as S5, with a maximum capacity of 22,800 gallons of roto solvent; and
- (5) two (2) S series fixed roof dome tanks, identified as S6 and S7, each with a maximum capacity of 22,800 gallons of reclaim solvent.
- (b) one (1) raw material storage area, installed in 1974, exhausting to the atmosphere, and consisting of:
  - (1) four (4) V series fixed roof dome tanks, identified as V10-V13, each with a maximum capacity of 18,600 gallons of resin;
  - one (1) V series fixed roof tank, identified as V14, with a maximum capacity of 18,600 gallons of gilsonite slurry;
  - one (1) V series fixed roof dome tank, identified as V15, with a maximum capacity of 11,300 gallons of polyamide:
  - (4) one (1) V series fixed roof dome tank, identified as V16, with a maximum capacity of 11.300 gallons of resin:
- (c) one (1) raw material storage area ("A" Department), installed in 1974, exhausting to the atmosphere, and consisting of:
  - (1) two (2) V series fixed roof dome tanks, identified as V17 and V18, each with a maximum capacity of 18,600 gallons of resin;
  - (2) two (2) V series fixed roof dome tanks, identified as V19 and V20, each with a maximum capacity of 18,600 gallons of clay;
  - (3) two (2) V series fixed roof dome tanks, identified as V21-V22, each with a maximum capacity of 18,600 gallons of Gilsonite; and
  - one (1) V series fixed roof tank, identified as V23, with a maximum capacity of 18,600 gallons of resin.
- (d) one (1) holding tank operation (mill room) consisting of:
  - one (1) holding fixed roof tank, exhausting to the atmosphere, identified as HT20, installed in 1996, with a maximum capacity of 2,400 gallons of clay;
  - (2) one (1) holding fixed roof tank, exhausting to the atmosphere, identified as HT21, installed in 1998, with a maximum capacity of 2,400 gallons of dispersant;
  - (3) two (2) holding fixed roof dome tanks, exhausting to the atmosphere, identified as HT23 and HT 24, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate;
  - (4) two (2) holding fixed roof tanks, exhausting to the atmosphere, identified as HT26 and HT28, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate; and
  - (5) two (2) holding fixed roof dome tanks, exhausting to the atmosphere, identified as HT29 and HT30, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate.

- (e) one (1) premixing operation (mill room), installed in 1974, exhausting to the atmosphere, and consisting of:
  - one (1) Pre Mix series fixed roof tank, identified as PM20, with a maximum capacity of 2,200 gallons of clay;

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- one (1) Pre Mix series fixed roof tank, identified as PM21, with a maximum capacity of 2,200 gallons of clay and varnish;
- one (1) Pre Mix series fixed roof tank, identified as PM22, with a maximum capacity of 1,500 gallons of gilsonite;
- (4) two (2) Pre Mix series fixed roof tanks, identified as PM 23 and PM24, each with a maximum capacity of 1,500 gallons of concentrate;
- (5) two (2) Pre Mix series fixed roof tanks, identified as PM 25 and PM 26, each with a maximum capacity of 1,500 gallons of concentrate; and
- (6) two (2) Pre Mix series fixed roof tanks, identified as PM 27 and PM 28, each with a maximum capacity of 1.500 gallons of concentrate: and
- (7) two (2) Pre Mix series fixed roof dome tanks, identified as PM29 and PM30, each with a maximum capacity of 1,500 gallons of concentrate.
- (f) one (1) blending operation, exhausting to the atmosphere, and consisting of:
  - (1) two (2) B series fixed roof dome tanks, installed in 1974, identified as B40 and B41, each with a maximum capacity of 5,100 gallons of ink;
  - three (3) B series fixed roof dome tanks, installed in 1974, identified as B42 through B44, each with a maximum capacity of 5,100 gallons of ink;
  - (3) three (3) B series fixed roof dome tanks, installed in 1974, identified as B45 through B47, each with a maximum capacity of 5,100 gallons of ink; and
  - three (3) B series fixed roof dome tanks, installed in 1974, identified as B48 through B50, each with a maximum capacity of 5,100 gallons of ink.
- (g) one (1) "A" Department blending operation, exhausting to the atmosphere, and consisting of:
  - (1) four (4) B series fixed roof dome tanks, installed in 1977, identified as B51 through B54, each with a maximum capacity of 2,590 gallons of ink;
  - three (3) B series fixed roof dome tanks, installed in 1996, identified as B55 through B57, each with a maximum capacity of 5,700 gallons of ink; and
  - three (3) B series fixed roof dome tanks, installed in 1996, identified as B58 through B60, each with a maximum capacity of 5,700 gallons of extender.
- (h) one (1) "A" Department base storage area, exhausting to the atmosphere, and consisting of:
  - (1) seven (7) F series fixed roof dome tanks, installed in 1977, identified as F104-110, each with a maximum capacity of 5,100 gallons of concentrate.
- (i) one (1) finished ink storage area, exhausting to the atmosphere, and consisting of:
  - eighteen (18) F series fixed roof dome tanks, installed in 1974, identified as F61-78, each with a maximum capacity of 9,150 gallons of ink;
  - three (3) F series fixed roof dome tanks, installed in 1974, identified as F79-81, each with a maximum capacity of 9,150 gallons of extender; and
  - (3) four (4) F series fixed roof dome tanks, installed in 1974, identified as F82-85, each with a maximum capacity of 9,150 gallons of ink;
  - two (2) F series fixed roof dome tanks, installed in 1974, identified as F86 and 87, each with a maximum capacity of 9,150 gallons of extender;
- (j) one (1) "A" Department finished ink storage area, exhausting to the atmosphere, and consisting of:
  - (1) sixteen (16) F series fixed roof dome tanks, installed in 1977, identified as F88-F103, each with a maximum capacity of 10,350 gallons of ink.

(k) Loading racks for loading finished products and solvents, with a maximum capacity of 13,100 gallons per hour.

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(I) Building vents (HV-1 through HV-4 and FV-1 through FV-4, venting indoor VOCs from piping losses to the atmosphere.)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to Standards of Performance for New Stationary Sources [326 IAC 12-1][40 CFR 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart K.

D.1.2 Petroleum Liquid Storage Vessel [326 IAC 12][40 CFR 60.110, Subpart K] [326 IAC 8-9-1]

Pursuant to 40 CFR 60.110, Subpart K and 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels), any change or modification, for the two storage fixed roof dome tanks (S1-S2), that would lead to an increase in true vapor pressure of the petroleum liquid, as stored, to equal to or greater than 0.75 psia at 20EC, shall obtain approval from the Office of Air Quality (OAQ), as required by 326 IAC 12, 40 CFR 60.110, and 326 IAC 8-9-1, before such change can occur.

#### **Compliance Determination Requirements**

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.4 Monitoring [326 IAC 8-9-6]

The Permittee shall comply with the monitoring requirements in 326 IAC 8-9-6 (for fixed roof dome tanks (S1-7, V10-23, HT20-21 and HT23-24, HT26, HT29, PM20, PM22-30, PM40-42, B43-54, F61-87, F90-F110)), and shall keep copies of all records for the life of the source

- (a) The Permittee shall keep copies of all records for the life of the source.
- (b) The Permittee shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

## D.1.5 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2 and D.1.4, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3 shall be taken daily and shall be complete and sufficient to establish compliance with the monitoring requirements established in Conditions D.1.2 and D.1.4.
  - (1) The owner or operator of each vessel subject to this rule shall keep all records for the life of the vessel.

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- (2) The owner or operator of the fixed roof dome tanks (S1-7, V10-23, HT20-21 and HT23-24, HT26, HT29, PM20, PM22-30, PM40-42, B43-54, F61-87, F90-F110) shall maintain a record and submit to the department a report containing the following information for each vessel:
  - (A) The vessel identification number,
  - (B) The vessel dimensions, and
  - (C) The vessel capacity.
- (3) The owner or operator of the two (2) storage fixed roof dome tanks (S1-S2) shall maintain a record containing the following information for each vessel:
  - (A) The type of VOL stored.
  - (B) The dates of the VOL storage.
  - (C) For each day of VOL storage, the average stored temperature for VOLs stored above or below the ambient temperature or average ambient temperature for VOLs stored at ambient temperature, and the corresponding maximum true vapor pressure.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### SECTION D.2

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)]:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
  - (2) four (4) air make up units exhausting to stacks HV-1 through HV-4,
  - (3) two (2) #2 fuel oil and natural gas fired boilers, identified as Boiler #1 and Boiler #2, each rated at five (5) million British thermal units (mmBtu) per hour and exhausting at two (2) stacks, identified as B1 and B2. [326 IAC 6-2-4]

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- (b) Activities or categories not previously identified with emissions less than or equal to insignificant thresholds
  - (1) Gilsonite Storage Silo Loading. [326 IAC 6-3-2]
  - (2) Handling of dry materials, with a maximum capacity of 2,000 pounds of dry materials per hour, utilizing a baghouse for particulate control.[326 IAC 6-3-2]
  - (3) Eleven (11) material handling operations, identified as Premix Collectors 20 through 30. [326 IAC 6-3-2]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from each of the two (2) boilers identified as B1 and B2, each rated at five (5) million British thermal units (mmBtu) per hour, shall be limited to 0.6 pounds per mmBtu heat input.

This limitation is based on the following equation:

 $Pt = 1.09/Q^{0.26}$ 

where: Pt = maximum allowable particulate matter (PM) emitted per mmBtu heat input

Q = total source max. indirect heater input = (for B1 = 5.0 mmBtu/hr), for B2 =10.0 mmBtu/hr)

For Q less than 10 mmBtu/hr, Pt shall not exceed 0.6.

#### D.2.2 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the handling of dry materials shall not exceed 4.1 pounds per hour when operating at a process weight rate of 2000 pounds per hour.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from Gilsonite Storage Silo Loading and the Eleven (11) material handling operations, identified as Premix Collectors 20 through 30, shall not exceed the pound per hour emission rate established as E in the following formula:

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ 

where E = rate of emission in pounds per hour; and

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P = process weight rate in tons per hour

## **Compliance Determination Requirement**

## D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 and D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

**COMPLIANCE DATA SECTION** 

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## PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Flint Ink North America Corporation

Source Address: 800 Industrial Blvd., New Albany, IN, 47150 Mailing Address: 800 Industrial Blvd., New Albany, IN, 47150

Part 70 Permit No.: T043-7305-00012

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.				
Please check what document is being certified:				
9 Annual Compliance Certification Letter				
9 Test Result (specify)				
9 Report (specify)				
9 Notification (specify)				
9 Other (specify)				
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.				
Signature:				
Printed Name:				
Title/Position:				
Date:				

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

P.O. Box 6015

100 North Senate Avenue Indianapolis, Indiana 46206-6015

Phone: 317-233-5674 Fax: 317-233-5967

## PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Flint Ink North America Corporation

Source Address: 800 Industrial Blvd., New Albany, IN, 47150 Mailing Address: 800 Industrial Blvd., New Albany, IN, 47150

Part 70 Permit No.: T043-7305-00012

#### This form consists of 2 pages

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9 This is an emergency as defined in 326 IAC 2-7-1(12)

C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

C The Permittee must submit notice by mail or facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable,	mark N/A	P	age 2 of 2	
Date/Time Emergency started:				
Date/Time Emergency-was corrected:				
Was the facility being properly operated Describe:	d at the time of the emergency?	Y N		
Type of Pollutants Emitted: TSP, PM-10	O, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:			
Estimated amount of pollutant(s) emitte	ed during emergency:			
Describe the steps taken to mitigate the	e problem:			
Describe the corrective actions/respons	se steps taken:			
Describe the measures taken to minimi	ze emissions:			
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:				
Form Completed by:			_	
Title / Position:			_	
Date:			_	
Phone:				

A certification is not required for this report.

Response Steps Taken:

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

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#### **PART 70 OPERATING PERMIT**

#### QUARTERLY DEVIATION and COMPLIANCE MONITORING REPORT

Source Name: Flint Ink North America Corporation 800 Industrial Blvd., New Albany, IN, 47150 Source Address: Mailing Address: 800 Industrial Blvd., New Albany, IN, 47150 Part 70 Permit No.: T043-7305-00012 Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD Permit Requirement (specify permit condition #) **Duration of Deviation: Date of Deviation: Number of Deviations: Probable Cause of Deviation:** Response Steps Taken: **Permit Requirement** (specify permit condition #) **Duration of Deviation:** Date of Deviation: **Number of Deviations: Probable Cause of Deviation:** 

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	1 ago 2 oi 2
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed By:	
Title/Position:	
Date:	
Phone:	

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit

# **Source Background and Description**

Source Name: Flint Ink North America Corporation

Source Location: 800 Industrial Blvd., New Albany, IN, 47150

County: Floyd SIC Code: 2893

Operation Permit No.: T043-7305-00012 Permit Reviewer: Phillip Ritz/EVP

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Flint Ink North America Corporation relating to the operation of a printing ink production plant.

# **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) one (1) solvent tank farm, installed in 1974, and exhausting to the atmosphere, and consisting of:
  - (1) two (2) S series fixed roof dome tanks, identified as S1 and S2, each with a maximum capacity of 57,000 gallons of reclaim solvent;
  - one (1) S series fixed roof dome tank, identified as S3, with a maximum capacity of 27,000 gallons of reclaim solvent;
  - one (1) S series fixed roof dome tank, identified as S4, with a maximum capacity of 27,000 gallons of toluene;
  - one (1) S series fixed roof dome tank, identified as S5, with a maximum capacity of 22,800 gallons of roto solvent; and
  - (5) two (2) S series fixed roof dome tanks, identified as S6 and S7, each with a maximum capacity of 22,800 gallons of reclaim solvent.
- (b) one (1) raw material storage area, installed in 1974, exhausting to the atmosphere, and consisting of:
  - (1) four (4) V series fixed roof dome tanks, identified as V10-V13, each with a maximum capacity of 18,600 gallons of resin;
  - one (1) V series fixed roof tank, identified as V14, with a maximum capacity of 18,600 gallons of gilsonite slurry;
  - one (1) V series fixed roof dome tank, identified as V15, with a maximum capacity of 11,300 gallons of polyamide;
  - one (1) V series fixed roof dome tank, identified as V16, with a maximum capacity of 11,300 gallons of resin;
- (c) one (1) raw material storage area ("A" Department), installed in 1974, exhausting to the atmosphere, and consisting of:
  - (1) two (2) V series fixed roof dome tanks, identified as V17 and V18, each with a maximum capacity of 18,600 gallons of resin;

- (2) two (2) V series fixed roof dome tanks, identified as V19 and V20, each with a maximum capacity of 18,600 gallons of clay;
- (3) two (2) V series fixed roof dome tanks, identified as V21-V22, each with a maximum capacity of 18,600 gallons of Gilsonite; and
- one (1) V series fixed roof tank, identified as V23, with a maximum capacity of 18,600 gallons of resin.
- (d) one (1) holding tank operation (mill room) consisting of:
  - one (1) holding fixed roof tank, exhausting to the atmosphere, identified as HT20, installed in 1996, with a maximum capacity of 2,400 gallons of clay;
  - one (1) holding fixed roof tank, exhausting to the atmosphere, identified as HT21, installed in 1998, with a maximum capacity of 2,400 gallons of dispersant;
  - two (2) holding fixed roof dome tanks, exhausting to the atmosphere, identified as HT23 and HT 24, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate:
  - (4) two (2) holding fixed roof tanks, exhausting to the atmosphere, identified as HT26 and HT28, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate; and
  - (5) two (2) holding fixed roof dome tanks, exhausting to the atmosphere, identified as HT29 and HT30, installed in 1996, each with a maximum capacity of 2,400 gallons of concentrate.
- (e) one (1) premixing operation (mill room), installed in 1974, exhausting to the atmosphere, and consisting of:
  - one (1) Pre Mix series fixed roof tank, identified as PM20, with a maximum capacity of 2,200 gallons of clay;
  - one (1) Pre Mix series fixed roof tank, identified as PM21, with a maximum capacity of 2,200 gallons of clay and varnish;
  - one (1) Pre Mix series fixed roof tank, identified as PM22, with a maximum capacity of 1,500 gallons of gilsonite;
  - (4) two (2) Pre Mix series fixed roof tanks, identified as PM 23 and PM24, each with a maximum capacity of 1,500 gallons of concentrate;
  - (5) two (2) Pre Mix series fixed roof tanks, identified as PM 25 and PM 26, each with a maximum capacity of 1,500 gallons of concentrate; and
  - (6) two (2) Pre Mix series fixed roof tanks, identified as PM 27 and PM 28, each with a maximum capacity of 1,500 gallons of concentrate; and
  - (7) two (2) Pre Mix series fixed roof dome tanks, identified as PM29 and PM30, each with a maximum capacity of 1,500 gallons of concentrate.
- (f) one (1) blending operation, exhausting to the atmosphere, and consisting of:
  - (1) two (2) B series fixed roof dome tanks, installed in 1974, identified as B40 and B41, each with a maximum capacity of 5,100 gallons of ink;
  - three (3) B series fixed roof dome tanks, installed in 1974, identified as B42 through B44, each with a maximum capacity of 5,100 gallons of ink;
  - three (3) B series fixed roof dome tanks, installed in 1974, identified as B45 through B47, each with a maximum capacity of 5,100 gallons of ink; and
  - three (3) B series fixed roof dome tanks, installed in 1974, identified as B48 through B50, each with a maximum capacity of 5,100 gallons of ink.
- (g) one (1) "A" Department blending operation, exhausting to the atmosphere, and consisting of:
  - (1) four (4) B series fixed roof dome tanks, installed in 1977, identified as B51 through B54, each with a maximum capacity of 2,590 gallons of ink;
  - three (3) B series fixed roof dome tanks, installed in 1996, identified as B55 through B57, each with a maximum capacity of 5,700 gallons of ink; and
  - three (3) B series fixed roof dome tanks, installed in 1996, identified as B58 through B60, each with a maximum capacity of 5,700 gallons of extender.

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- (h) one (1) "A" Department base storage area, exhausting to the atmosphere, and consisting of:
  - (1) seven (7) F series fixed roof dome tanks, installed in 1977, identified as F104-110, each with a maximum capacity of 5,100 gallons of concentrate.
- (i) one (1) finished ink storage area, exhausting to the atmosphere, and consisting of:
  - eighteen (18) F series fixed roof dome tanks, installed in 1974, identified as F61-78, each with a maximum capacity of 9,150 gallons of ink;
  - three (3) F series fixed roof dome tanks, installed in 1974, identified as F79-81, each with a maximum capacity of 9,150 gallons of extender; and
  - four (4) F series fixed roof dome tanks, installed in 1974, identified as F82-85, each with a maximum capacity of 9,150 gallons of ink;
  - (4) two (2) F series fixed roof dome tanks, installed in 1974, identified as F86 and 87, each with a maximum capacity of 9,150 gallons of extender;
- (j) one (1) "A" Department finished ink storage area, exhausting to the atmosphere, and consisting of:
  - (1) sixteen (16) F series fixed roof dome tanks, installed in 1977, identified as F88-F103, each with a maximum capacity of 10,350 gallons of ink.
- (k) Handling of dry materials, with a maximum capacity of 2,000 pounds of dry materials per hour, utilizing a baghouse for particulate control.
- (I) Loading racks for loading finished products and solvents, with a maximum capacity of 13,100 gallons per hour.
- (m) Building vents (HV-1 through HV-4 and FV-1 through FV-4, venting indoor VOCs from piping losses to the atmosphere.)

# **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new emission units and pollution control equipment receiving prior approval at this source during this review process.

#### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
  - (1) four (4) air make up units exhausting to stacks HV-1 through HV-4,
  - (2) two (2) #2 fuel oil and natural gas fired boilers, identified as Boiler #1 and Boiler #2, each rated at five (5) million British thermal units (mmBtu) per hour and exhausting at two (2) stacks, identified as B1 and B2.
- (b) VOC and HAP storage containers:
  - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
  - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

- (d) Cleaners and solvents characterized as follows:
  - (1) Having a vapor pressure equal to or less than 2 kPa: 12mm Hg: or 0.3 psi measure at 38 degrees C (100°F) or,
  - (2) Having a vapor pressure equal to or less than 0.7 kPa: 5mm Hg; or 0.1 psi measured at 20°C (68°F);

the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

- (e) Closed loop heating and cooling systems.
- (f) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (g) Noncontact cooling tower systems with a forced and induced draft cooling tower system not regulated under a NESHAP,
- (h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (i) Heat exchanger cleaning and repair.
- (j) Process vessel degassing and cleaning to prepare for internal repairs.
- (k) Paved and unpaved roads and parking lots with public access,
- (I) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (m) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower,
- (n) A laboratory as defined in 326 IAC 2-7-1 (20)(C),
- (o) Activities or categories not previously identified with emissions less than or equal to insignificant thresholds
  - (1) Gilsonite Storage Silo Loading.

#### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 22-05-0-0046, issued on June 24, 1976;
- (b) OP 22-05-0-0045, issued on June 24, 1976; and
- (c) Registration, issued on August 26, 1980.

All conditions from previous approvals were incorporated into this Part 70 permit.

#### **Enforcement Issue**

There are no enforcement actions pending.

# Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 15, 1998. Additional information was received on May 5, 2000.

#### **Emission Calculations**

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (Appendix A, pages 1 through 6.)

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	greater than 100
PM-10	less than 100
SO <sub>2</sub>	less than 100
VOC	less than 100
СО	less than 100
NO <sub>x</sub>	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Toluene	greater than 10
Ethyl benzene	less than 10
Xylene	less than 10
TOTAL	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year.. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
  Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 1996 Source Pollutant Emissions Summary emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.35
PM-10	0.35
SO <sub>2</sub>	1.10
VOC	25.71
СО	0.80
NO <sub>x</sub>	3.15
HAP (Toluene)	24.53
Total HAPs	24.93

# **County Attainment Status**

The source is located in Floyd County.

Pollutant	Status				
PM-10	attainment				
SO <sub>2</sub>	attainment				
NO <sub>2</sub>	attainment				
Ozone	nonattainment (moderate)				
СО	attainment				
Lead	attainment				

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and  $NO_x$  emissions are considered when evaluating the rule applicability relating to the ozone standards. Floyd County has been designated as nonattainment for ozone.

# Federal Rule Applicability

- (a) (1) The two storage fixed roof dome tanks (S1-S2) are subject to the requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.110-112(a), Subpart K), because the fixed roof dome tanks were constructed after the rule applicability date of June 11, 1973 and have a storage capacity greater than 40,000 gallons. However, the true vapor pressure of the petroleum liquid, as stored, is less than 1.0 psia, and therefore the source is exempt from the monitoring requirements of Subpart K.
  - (2) The remaining storage fixed roof dome tanks (S3-7, V10-23, HT20-26, PM20, PM22-30, PM40-42, B43-54, F61-87, F90-F110) are not subject to the requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.110-112(a), Subpart K), because the fixed roof dome tanks have storage capacities less than 40,000 gallons.
- (b) The storage fixed roof dome tanks (S1-7, V10-23, HT20-26, PM20, PM22-30, PM40-42, B43-54, F61-87, F90-F110) are not subject to the requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.110-112(a), Subpart Ka), because all of the fixed roof dome tanks were constructed prior to the rule applicability date of May 18, 1978 and have not been reconstructed or modified prior to July 23, 1984.
- (c) The five (5) B series fixed roof dome tanks, installed in 1996, identified as B55-59, one (1) blending fixed roof tank, identified as B60 and the five (5) holding fixed roof dome tanks, identified as HT20, 21, 22, 26 and 29, are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.112b, Subpart Kb), because the capacities of each of the fixed roof dome tanks are less than 40 cubic meters. Also, the rest of the source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.112b, Subpart Kb), because the fixed roof dome tanks were constructed or modified prior to the July 23, 1984 applicability date.
- (d) This source is not subject to the requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.430-435, Subpart QQ), because this source is a printing ink production plant and does consist of any packaging rotogravure, publication rotogravure, or flexographic printing operations.

- (e) This source is not subject to the requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60.110-112(a), Subpart FFF), because this source is a printing ink production plant and does not conduct any flexible vinyl and urethane coating or printing operations
- (f) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), (40 CFR 63.820-839, Subpart KK), as this source does not operate any publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses.

#### State Rule Applicability - Entire Source

# 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is not subject to 326 IAC 2-2 (PSD) as it has the potential to emit any criteria pollutant below 250 tons per 12-month period and this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

# 326 IAC 2-3 (Emission Offset)

This source is not subject to 326 IAC 2-3 (Emission Offset) as it has the potential to emit VOC below 100 tons per 12-month period. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year in Floyd County of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Individual Facilities

# 326 IAC 2-4.1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). Although the storage fixed roof dome tanks (S1-7, V10-23, HT20-26, PM20-30, HT20 and HT23-24, HT26, HT28-30, B40-60, and F61-110) have a PTE more than 10 tons per year of a single HAP, all of the fixed roof dome tanks were constructed prior to the July 27, 1997 applicability date. Therefore, the storage fixed roof dome tanks (S1-7, V10-23, HT20-21 and HT23-24, PM20-30, HT20 and HT23-24, HT26, HT28-30, B40-60, and F61-110) are not subject to the requirements of 326 IAC 2-4.1. Also, HT21, constructed in 1998, has the potential to emit (PTE) less than 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, therefore 326 IAC 2-4.1 does not apply.

# 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The two (2) boilers each rated at five (5) million British thermal units (mmBtu) per hour, identified as B1 and B2, are subject to the particulate matter limitations of 326 IAC 6-2. Pursuant to this rule:

the one (1) boiler identified as B1 (constructed in 1984) is limited by the following equation from 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where: Pt = maximum allowable particulate matter (PM) emitted per mmBtu heat input Q = total source max. indirect heater input = boilers B1 = 5.0 mmBtu/hr

 $Pt = 1.09/5.0^{0.26} = 0.72 lbs PM/mmBtu$ 

However, for Q less than 10 mmBtu/hr, Pt shall not exceed 0.6. Therefore, the one (1) boiler identified as B1 is limited to 0.6 lbs PM/mmBtu,

(b) the one (1) boiler identified as B2 (constructed in 1985) is limited by the following equation from 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where: Pt = maximum allowable particulate matter (PM) emitted per mmBtu heat input Q = total source max. indirect heater input = boilers B1 + B2 = 10.0 mmBtu/hr

 $Pt = 1.09/10^{0.26} = 0.6 lbs PM/mmBtu$ 

Therefore, the one (1) boiler identified as B2 is limited to 0.6 lbs PM/mmBtu.

# compliance calculation:

(0.31 tons PM/yr) \* (hr/5.0 mmBtu) \* (yr/8,760 hrs) \* (2,000 lbs/ton) = 0.01 lbs PM/mmBtu

Actual lbs PM/mmBtu (0.01) from boiler B1, and Actual lbs PM/mmBtu (0.01) from boiler B2, are less than allowable lbs PM/mmBtu (0.6 and 0.6 lbs/mmBtu, respectively), therefore the two (2) boilers (ID B1 and B2) will comply with the requirements of 326 IAC 6-2-4.

# 326 IAC 6-3-2 (Process Operations)

(a) The fixed roof dome tanks located at the source, consisting of: (S1-7, V10-23, HT20-26, PM20-30, HT20-21 and HT23-24, HT26, HT28-30, B40-60, and F61-110) are not subject to 326 IAC 6-3-2 (Process Operations), because the fixed roof dome tanks do not have PM emissions (See emission calculations, pages 2 of 6).

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the handling of dry materials shall not exceed 4.1 pounds per hour when operating at a process weight rate of 2000 pounds per hour.
- (c) The allowable PM emission rate from the Gilsonite Storage Silo Loading shall not exceed the pound per hour emission rate established as E in the following formula:

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The blending fixed roof dome tanks, identified as B55-60 and the holding fixed roof dome tanks, identified as HT20-22, HT26, HT29, are not subject to the provisions of 326 IAC 8-1-6. This rule applies to facilities located in any county constructed after January 1, 1980, which are not otherwise regulated by any other provisions of 326 IAC 8, and have potential emissions of 25 tons/yr or greater. The blending fixed roof dome tanks, identified as B55-60 and the holding fixed roof dome tanks, identified as HT20-21 and HT23-24, HT26, HT29, have potential emissions less than 25 tons per year and are therefore not subject to this regulation.

# 326 IAC 8-5-5 (Graphic Arts Operations)

This source is not subject to the requirements of 326 IAC 8-5-5 (Graphic Arts Operations), because this source is a printing ink production plant and does not consist of any packaging rotogravure, publication rotogravure, or flexographic printing operations.

# 326 IAC 8-6 (Organic Solvent Emission Limitations)

This rule applies to sources commencing operation after October 7, 1974 and prior to January 1, 1980, located anywhere in the state, with potential VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. This source does not have potential VOC emissions at, or in excess of 100 tons per year; therefore, this rule does not apply.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)

This source is not subject to the requirements of 326 IAC 8-7, because there are no coating operations at this source.

#### 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1, on and after October 1, 1995 stationary vessels used to store volatile organic liquids (VOL) must comply with the requirements of the rule if located in Clark, Floyd, Lake or Porter Counties. Stationary vessels with capacities less than 39,000 gallons are only subject to the reporting and record keeping requirements of the rule. Stationary vessels with capacities equal to or greater than 39,000 gallons storing a VOL with a maximum true vapor pressure equal to or greater than 0.5 pounds per square inch absolute (psia), but less than 0.75 psia, are only subject to 326 IAC 8-9-6(a),(b),(g), and (h). Fixed roof dome tanks S1 and S2 have a capacity equal to or greater than 39,000 gallons storing a VOL with a maximum true vapor pressure equal to or greater than 0.5 pounds per square inch absolute (psia), but less than 0.75 psia, are only subject to 326 IAC 8-9-6(a),(b),(g), and (h). Therefore, the fixed roof dome tanks (S1-7, V10-23, HT20-21 and HT23-24, HT26, HT29, PM20, PM22-30, PM40-42, B43-54, F61-87, F90-F110) are subject to the reporting and record keeping requirements of this rule.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (a) The fixed roof dome tanks located at the source have applicable compliance monitoring conditions as specified below:
  - (1) The Permittee shall comply with the monitoring requirements in 326 IAC 8-9-6 (for fixed roof dome tanks (S1-7, V10-23, HT20-21 and HT23-24, HT26, HT29, PM20, PM22-30, PM40-42, B43-54, F61-87, F90-F110)), and shall maintain the following records for a minimum of five (5) years. The Permittee shall keep copies of all records required by this section, except for the record required by the paragraph below, for at least five (5) years. The record required by the paragraph below will be kept for the life of the source.

The Permittee shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel.

These monitoring conditions are necessary because the records for the fixed roof dome tanks (S1-7, V10-23, HT20-26, PM20, PM22-30, PM40-42, B43-54, F61-87, F90-F110) located at the source must be kept to ensure compliance with 326 IAC 8-9-6.

#### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Appendix A, page 2 of 6)

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# Conclusion

The operation of this printing ink production plant shall be subject to the conditions of the attached proposed **Part 70 Permit No. T043-7305-00012.** 

# Indiana Department of Environmental Management Office of Air Quality

# Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Flint Ink North America Corporation

Source Location: 800 Industrial Blvd., New Albany, IN, 47150

County: Floyd SIC Code: 2893

Operation Permit No.: T043-7305-00012 Permit Reviewer: Phillip Ritz/EVP

On September 7, 2000, the Office of Air Quality (OAQ) had a notice published in the New Albany Tribune, New Albany, Indiana, stating that Flint Ink North America Corporation had applied for a Part 70 Operating Permit to operate a printing ink production plant. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 4, 2000, David Lamoree of URS Corporation submitted comments on behalf of Flint Ink North America Corporation on the proposed Part 70 Operating Permit. The summary of the comments and corresponding responses is as follows:

#### **Comment 1**

Remove the Dust Collector listed in Section A.2 (k) and the maximum capacity statement and add this emission unit to Section A.3, as this emission unit is an insignificant activity since PM10 emissions are less than in the insignificant thresholds as defined in 326 IAC 2-7-1(21)(B). Additionally, please remove condition D.1(k).

#### Response 1

(a) The calculations have been corrected, a methodology has been added and the changes are listed below.

All of the dust resulting from the handling of dry materials is pneumatically transferred to a baghouse (95% efficiency). Based on historical data, 10,400 pounds per year of particulate matter is collected in the baghouse. Therefore, the uncontrolled emission rate is:

10,400 lbs/yr collected	6240	hours of operation/year
0.95 <b>95</b> % collection efficiency	<del>33.33</del> 1.75	pounds of PM generated/hour (uncontrolled)
	<del>0.026</del> 0.01	pounds of PM -10 generated/hour (uncontrolled)
	<del>146.00</del> 7.67	tons of PM generated/ <del>hour</del> year (uncontrolled)
	<del>0.11</del> <b>0.06</b>	tons of PM -10 generated/ <del>hour</del> year (uncontrolled)
	<del>7.30</del> 0.38	tons of PM generated/ <del>hour</del> year (controlled)
	<del>0.11</del> <b>0.00</b>	tons of PM -10 generated/ <del>hour</del> year (controlled)

Note:

Sieve analysis by the source on a dust sample determined that 0.78% was less than PM10.6 by weight.

#### Methodology:

Pounds of PM generated/hour(uncontrolled)= amount of PM collected per year / actual hours of operation per year + (amount collected per year \* (1- control efficiency) / actual hours of operation per year)

Pounds of PM10 generated/hour(uncontrolled)=pounds of PM generated/hour(uncontrolled) \* 0.78% PM10

Tons of PM generated per year (uncontrolled) = pounds of PM generated/hour(uncontrolled) \*8760 hours/year

Tons of PM10 generated per year (uncontrolled) = pounds of PM10 generated/hour(uncontrolled) \*8760 hours/year

Tons of PM generated per year (controlled) = pounds of PM generated/hour(uncontrolled) \*8760 hours/year \*(1-control efficiency)

Tons of PM10 generated per year (controlled) = pounds of PM10 generated/hour(uncontrolled) \*8760 hours/year \*(1-control efficiency)

- (b) The dust collector is an insignificant activity and has been moved to Section A.3. The dust collector has also been moved from Section D.1 to Section D.2. The changes to the permit are as follows:
  - (2) Handling of dry materials, with a maximum capacity of 2,000 pounds of dry materials per hour, utilizing a baghouse for particulate control. [326 IAC 6-3-2]

#### Comment 2

Change A.3(b)(1) to correct the applicable regulation to state 326 IAC 6-3-2.

#### Response 2

The rule citation has been changed. Section A.3(b) of the permit has been revised as follows:

(1) Gilsonite Storage Silo Loading. [326 IAC 6-2-3 6-3-2]

#### Comment 3

Add the following insignificant activities:

Premix collector-20 [326 IAC 6-3-2]

Premix collector-21 [326 IAC 6-3-2]

Premix collector-22 [326 IAC 6-3-2]

Premix collector-23 [326 IAC 6-3-2]

Premix collector-24 [326 IAC 6-3-2]

Premix collector-25 [326 IAC 6-3-2]

Premix collector-26 [326 IAC 6-3-2]

Premix collector-27 [326 IAC 6-3-2]

Premix collector-28 [326 IAC 6-3-2]

Premix collector-29 [326 IAC 6-3-2]

Premix collector-30 [326 IAC 6-3-2]

#### Response 3

The premix collectors already listed in the TSD, have been added to Section A.3 of the permit as insignificant activities. Section A.3 of the permit has been revised as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:
  - (1) four (4) air make up units exhausting to stacks HV-1 through HV-4,
  - two (2) #2 fuel oil and natural gas fired boilers, identified as Boiler #1 and Boiler #2, each rated at five (5) million British thermal units (mmBtu) per hour and exhausting at two (2) stacks, identified as B1 and B2. [326 IAC 6-2-4]
- (b) Activities or categories not previously identified with emissions less than or equal to insignificant thresholds

- (1) Gilsonite Storage Silo Loading. [326 IAC 6-2-3 6-3-2]
- (2) Handling of dry materials, with a maximum capacity of 2,000 pounds of dry materials per hour, utilizing a baghouse for particulate control.[326 IAC 6-3-2]
- (3) Eleven (11) material handling operations, identified as Premix Collectors 20 through 30. [326 IAC 6-3-2]

#### Comment 4

Remove Condition D.1.3, as none of the sources listed in D.1 are regulated by this standard.

#### Response 4

The handling of dry materials and the 326 IAC 6-3-2 requirements are now listed as insignificant activities in Section D.2. Condition D.2.2 has been revised to list the premix collectors and handling of dry materials. Condition D.1.3 has been deleted from the permit and the remaining Section D.1 conditions have been renumbered.

#### D.2.2 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the handling of dry materials shall not exceed 4.1 pounds per hour when operating at a process weight rate of 2000 pounds per hour.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from Gilsonite Storage Silo Loading and the Eleven (11) material handling operations, identified as Premix Collectors 20 through 30, shall not exceed the pound per hour emission rate established as E in the following formula:

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour; and  $P =$  process weight rate in tons per hour

#### Comment 5

Records on the vessel identification, dimensions, and capacity will be recorded and revised at the time there is a change in any of the previously listed parameters. Therefore, recording of this required information on a daily basis is not necessary. Furthermore, the applicable regulations do not require daily record keeping of the parameters. 326 IAC 8-9-1 regulates storage vessels in Floyd County, Indiana. Section D.1.6(a)(3) is based on 326 IAC 8-9-6(g) that states storage vessels with a capacity greater than 39,000 gallons storing a Volatile Organic Liquid (VOL) with a maximum true vapor pressure greater than or equal to five-tenths (0.5) pounds per square inch absolute (psia) but less than seventyfive hundredth (0.75) psia shall maintain records on the type of VOL stored, dates of VOL storage, and for each day of storage average ambient temperature and corresponding maximum true vapor pressure. 326 IAC 8-9-3 (5)(A)(iv)(BB) states that the maximum true vapor pressure for a VOL stored at ambient temperature shall be determined at 77.7°F for Floyd County. Storage tanks S1 and S2 are the only storage tanks with a capacity greater than 39,000 gallons and store a VOL with a maximum true vapor pressure greater than 0.5 psia and less than 0.75 psia. These tanks store toluene and will continue to store toluene for the foreseeable future, any changes in VOL stored will be recorded. According to the definition of maximum true vapor pressure, toluene has a maximum true vapor pressure of 0.5605 psia. This value is not based on ambient temperature and will not change as ambient temperature changes. Therefore it is over-burdensome to require the facility to record the average ambient temperature on a daily basis since the average ambient temperature will have no effect on the maximum true vapor pressure or additional regulation applicability.

#### Response 5

The fixed dome roof tanks S1 and S2 have a design capacity greater than or equal to 39,000 gallons and store a VOL with a maximum true vapor pressure greater than 0.5 psia and less than 0.75 psia, therefore, the emission units are not subject to the requirements of 326 IAC 8-9-5 (Standards) or 326 IAC 8-9-6 (Testing and Procedures). However, the fixed dome roof tanks S1 and S2 must still satisfy the requirements of 326 IAC 8-9-6 (Recordkeeping and Reporting). 326 IAC 8-9-6(g)(3) states that "for each day of VOL storage, the average stored temperature for VOCs stored above or below the ambient temperature or average ambient temperature for VOLs stored at ambient temperature, and the corresponding maximum true vapor pressure." Therefore, these records must be kept daily (each day that VOL is stored in the tanks). The permit has been revised as follows:

#### D.1.65 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2 and D.1.54, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3 shall be taken daily and shall be complete and sufficient to establish compliance with the monitoring requirements established in Conditions D.1.2 and D.1.54.
  - (1) The owner or operator of each vessel subject to this rule shall keep all records for the life of the vessel.
  - (2) The owner or operator of the fixed roof dome tanks (S1-7, V10-23, HT20-21 and HT23-24, HT26, HT29, PM20, PM22-30, PM40-42, B43-54, F61-87, F90-F110) shall maintain a record and submit to the department a report containing the following information for each vessel:
    - (A) The vessel identification number,
    - (B) The vessel dimensions, and
    - (C) The vessel capacity.
  - (3) The owner or operator of the two (2) storage fixed roof dome tanks (S1-S2) shall maintain a record <del>and submit to the department a report</del> containing the following information for each vessel:
    - (A) The vessel temperature, and The type of VOL stored.
    - (B) The maximum true vessel vapor pressure of the liquid stored. The dates of the VOL storage.
    - (C) For each day of VOL storage, the average stored temperature for VOLs stored above or below the ambient temperature or average ambient temperature for VOLs stored at ambient temperature, and the corresponding maximum true vapor pressure.

#### Comment 6

Revised the emission calculations to remove the Ink Storage activity, as these are the same operations as the Tanks.

#### Response 6

The emission calculations have been revised to remove the ink storage activity calculations, page 11 of 16 of TSD App. A, since they are for the same operation as the tank calculations, page 12 of 16 of TSD App. A. The tank calculations have been revised to list the maximum capacity of the tanks. The dry materials handling operation calculations, page 16 of 16 of TSD App. A, have also been revised in response to Comment 1. The emission summary, page 1 of 16 of TSD App. A, has been revised to include the new emission totals.

The revised Potential to Emit table on page 5 of 11 of the TSD is as follows:

Pollutant	Potential To Emit (tons/year)
PM	<del>greater</del> less than 100
PM-10	less than 100
SO <sub>2</sub>	less than 100
VOC	less than 100
CO	less than 100
NO <sub>x</sub>	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Toluene	greater than 10
Ethyl benzene	less than 10
Xylene	less than 10
TOTAL	greater than 25

The changes to the emission calculations are as follows:

Finished   Emissions   Emissions   Emissions   Forcet   Percent							T	ank Calculations							
Source Product Throughput (byr) Factor (byr) (byr) Emissions Source (ibyr) Toluene Xylene Ethyl benzene (ibyr) (ib			Standing Loss	Working Loss				Total VOC				Toluene	Xylene	Ethyl benzene	Total HAP
Throughput		Finished	Emissions		Emissions	Total Loss		Emissions	Percent	Percent	Percent	Emissions	Emissions	Emissions	Emissions
S Series   350,000,000   700   1,73E-005   6,072   6,772   S Series   6,772   96,00%   4,00%   0,00%   6,501   271   0   6,77   Veries   7,907-3,566   100   1,45E-005   4,472,6,31   54E-1,63   1,50E-1,63   1,50E-1,63E-1,63   1,50E-1,63E-1,63   1,50E-1,63E-1,63   1,50E-1,63E-1,6	Source		(lb/yr)	Finished	(lb/yr)	Emissions	Source	(lb/yr)	Toluene	Xylene	Ethyl benzene	(lb/yr)	(lb/yr)	(lb/yr)	(lb/yr)
S Series   350,000,000   700   1,73E-005   6,072   6,772   S Series   6,772   96,00%   4,00%   0,00%   6,501   271   0   6,77   Veries   7,907-3,566   100   1,45E-005   4,472,6,31   54E-1,63   1,50E-1,63   1,50E-1,63E-1,63   1,50E-1,63E-1,63   1,50E-1,63E-1,63   1,50E-1,63E-1,6	torage Tanks						Storage Tanks								
V Series   32-037-360   100   1.45E-005   4.447-5,663   4.647-5,163   V Series   4.647-5,163   100.00%   0.00%   0.00%   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.00   4.648-5,63   0.00   0.0	S Series	350.000.000	700	1.73E-005	6.072	6.772	S Series	6.772	96.00%	4.00%	0.00%	6.501	271	0	6.772
350,000,000   1.50E-005	V Series	350 000 000	100	1.45E-005					100.00%		0.00%		0	0	<del>1,517</del> 5,163
IT Series   97-937-869   10   1.50E-005   4-472-5,259   1-462-5,269   IT Series   4-462-5,269   97.69%   0.39%   0.00%   4.447-5,147   6.21   0   4-456-5,350,000,000     B Series   97-937-869   50   8.07E-005   7-904-28,245   7-954-28,295   B Series   7-954-28,295   94.99%   2.48%   0.77%   7-554-28,875   497-702   64-218   7-944-28,205   7-954-28	PM Series	<del>97,937,859</del> <b>350,000,000</b>	•••••	1.60E-004	<del>15,688</del> 56,064	<del>15,688</del> 56,064	PM Series	<del>15,688</del> <b>56,064</b>	97.69%	0.39%	0.00%	<del>15,326</del> 54,769	<del>61</del> 219		<del>15,387</del> <b>54,9</b> 8
350,000,000	HT Series				, .,	, ,		, ,				, -,	-	0	<del>1,453</del> 5,168
Storage   350,000,000   Storage	B Series	350,000,000	50				B Series		94.98%	2.48%	0.77%			<del>61</del> 218	<del>7,813</del> 27,79
Product   Storage   Subtotal   Product   Storage			10	8.48E-006	<del>831</del> <b>2,969</b>	<del>841</del> 2,979		<del>841</del> 2,979	94.98%	2.48%	0.77%	<del>799-</del> 2,830	<del>21</del> 74	<del>6</del> 23	<del>826</del> 2,926
Subtotal   42-256-132,887	Series (Final Product		100	8.07E-005	<del>7,904</del> 28,245	8,004 28,345	F Series (Final	8,004 28,345	94.98%	2.48%	0.77%	<del>7,602</del> <b>26,922</b>	<del>198</del> <b>703</b>	<del>62</del> 218	<del>7,862</del> 27,843
Emission Factor   Factor   Process Piping   Factor   Process Piping   Product   Prod	Storage)				Subtotal	<del>42,256</del> 132,887	Storage)								
Cess Piping   Cib VOC/lb Finished Product   Process Piping   Process Piping   Process Piping   Process Piping   Process Piping   Product   Produ		• • • • • • • • • • • • • • • • • • • •													
MixBlendin   97,937,859   3.10E-005   3,993 10,839   PreMix   Blending Area   350,000,000   5.41E-006   529-1,892   Product   529-1,892   100.00%   0.00%   0.00%   529-1,892   0   0   0   0   0   0   0   0   0	rocess Piping		(lb VOC/lb Finished				Process Piping								
Product   97,937,859   5.41E-006   Subtotal   3,562 12,731   Subtotal   12,477 44,590   94.98%   2.48%   0.77%   14,854 42,352   399 1,106   96.343   12,256 4   36,000	reMixBlendin g Area	<del>97,937,859</del>	,			<del>3,033</del> 10,839		<del>3,033</del> 10,839	100.00%	0.00%	0.00%	<del>3,033</del> 10,839	0	0	<del>3,033</del> 10,83
Subtotal   3,562 12,731   3,562 12	Product	<del>97,937,859</del>				<del>529-</del> 1,892	Product	,					0	0	<del>529</del> 1,892
Product 97,937,859 1.27E-004 350,000,000 7.350,000,000 94.98% 2.48% 0.77% 14,851 42,352 300 1,106 96 343 42,256 4 350,000,000 7.350,000,000 7.350,000,000 7.350,000,000 7.350,000,000 7.350,000,000 7.350,000,000 7.350,	Tanker Truck			•••••	Subtotal	<del>3,562</del> <b>12,731</b>	Tanker Truck	<del>3,562</del> 12,731							
Recycled 5,250,000 1.40E-004 296-735 Recycled Solvent 5,250,000 0.00% 0.	Product		1.27E-004			<del>12,477</del> 44,590		<del>12,477</del> 44,590	94.98%	2.48%	0.77%	<del>11,851</del> <b>42,352</b>	<del>309</del> 1,1 <b>06</b>	<del>96</del> 343	<del>12,256</del> <b>43</b> ,80
Total 58,502-190,942 Total 56,364 184,023 1,064 3,094 225 802 57,61 187,9	Recycled Solvent	<del>1,469,068</del>	1.40E-004		0	<del>206-</del> 735	Recycled	<del>206-</del> 735	100.00%	0.00%	0.00%	<del>206</del> 735	0	0	<del>206</del> 735
187,9					Subtotal	12,003 45,325									
					Total	<del>58,502</del> -190,942					Total	<del>56,364</del> 184,023	<del>1,064</del> 3,094	<del>225</del> 802	<del>57,654</del> 187,920
					Total tons/yr	<del>29.25</del> 95.47					Total tons/yr	<del>28.18</del> <b>92.01</b>	<del>0.53</del> 1.55	<del>0.11</del> <b>0.40</b>	28.83 93.9

# Emission Summary Uncontrolled Potential Emissions (tons/year)

Pollutant	Emissions Generating Activity  tant Natural Gas Tanks <del>Ink Storage</del> Piping Dry Materials Ink Loadin						
	Combustion		0		Handling	-	
PM	0.63	0.00	0.00	0.00	7.67 <del>146.00</del>	0.00	8.30 <del>146.63</del>
PM10	0.63	0.00	0.00	0.00	0.06 <del>0.11</del>	0.00	0.69 <del>0.74</del>
SO2	2.22	0.00	0.00	0.00	0.00	0.00	2.22
NOx	6.26	0.00	0.00	0.00	0.00	0.00	6.26
VOC	0.11	66.44 <del>29.25</del>	<del>27.06</del>	6.37 <del>1.78</del>	0.00	22.66 <del>5.96</del>	95.58 <del>64.16</del>
CO	1.56	0.00	0.00	0.00	0.00	0.00	1.56
total HAPs	0.00	65.33 <del>28.83</del>	<del>26.64</del>	6.37 <del>-0.00</del>	0.00	22.27 <del>5.81</del>	93.97 <del>-61.28</del>
worst case single HAP	0.00	<b>64.10</b> <del>28.18</del> (toluene)	<del>26.08 (toluene)</del>	6.37 <del>-0.00</del>	0.00	21.54 5.64 (toluene)	92.01-59.90 (toluene)
Total emissions based on r	rated capacity at 8,760	) hours/year.					

Emissions Generating Activity							
Pollutant	Natural Gas Combustion	Tanks	Ink Storage	Piping	Dry Materials Handling	Ink Loading	TOTAL
PM	0.63	0.00	0.00	0.00	0.38-7.30	0.00	1.01 <del>7.</del> 9
PM10	0.63	0.00	0.00	0.00	0.00 <del>-0.11</del>	0.00	0.63 <del>0.</del>
SO2	2.22	0.00	0.00	0.00	0.00	0.00	2.2
NOx	6.26	0.00	0.00	0.00	0.00	0.00	6.2
VOC	0.11	66.44 <del>29.25</del>	<del>27.06</del>	6.37 <del>1.78</del>	0.00	22.66 <del>5.96</del>	95.58 <del>64.</del>
CO	1.56	0.00	0.00	0.00	0.00	0.00	1.5
total HAPs	0.00	65.33 <del>28.83</del>	<del>26.64</del>	6.37 <del>-0.00</del>	0.00	22.27 <del>5.81</del>	93.97 <del>-61.</del> 2
t case single HAP	0.00	64.10 28.18 (toluene)	26.08 (toluene)	6.37 <del>-0.00</del>	0.00	21.54 5.64 (toluene)	92.01-59.90 (toluen

Total emissions based on rated capacity at 8,760 hours/year, after control.

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Upon further review from the OAQ, the OAQ has decided to make the following changes to the Part 70 Operating Permit (additions indicated in **boldface**, deletions indicated by strikeout for emphasis):

The OAQ has revised the permit to replace the old name of Office of Air Management (OAM) with the new name of the Office of Air Quality (OAQ).

1. The expiration date has been added to the signature box.

Operation Permit No.: T043-7305-00012	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date:  Expiration Date:

- 2. A.1 (General Information) has been revised to include a rule cite for the definition of a major source in 326 IAC 2-7; allow for a name and/or title in the responsible official section; and eliminate the phone number of the contact person.
- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]
- 3. B.1 (Permit No Defense) has been deleted. This is not in IC13, but there is general authority for this condition in 326 IAC 2-7-15. Therefore, most of this language has been added to B.14 (Permit Shield). B.14 provides for when the possession of a permit does provide a defense and provides that it is only for those requirements in existence at the time of permit issuance. All other B conditions have been renumbered as a result of this change.

# B.1 Permit No Defense [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."
- 4. B.3 (Permit Term) language has been revised added to clarify that amendments, revisions or modifications do not extend the expiration date of the permit. The expiration date will always be five years from the issuance date of the original permit. The expiration date will now be typed in the signature box as well.
- B.3 Permit Term [326 IAC 2-7-5(2)]
  - This permit is issued for a fixed term of five (5) years from the effective original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.
- 5. B.8 (Duty to Supplement and Provide Information) has been revised to provide greater consistency with the language in the rule.

- B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]
  - (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to When furnishing copies of requested records directly to U. S. EPA, then the Permittee must furnish record directly to the U. S. EPA. The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
- 6. B.9 (Compliance with Permit Conditions) has been revised to include new paragraph (c) to clarify that an emergency does constitute a defense in an enforcement action if the Permittee complies with the emergency procedures.
- B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
  - (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
    - (1) Enforcement action;
    - (2) Permit termination, revocation and reissuance, or modification; or
    - (3) Denial of a permit renewal application.
  - (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
  - (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

6. B.10 (Certification) paragraph (b) has been modified to clarify when a certification is needed.

# B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).
- 7. B.11 (Annual Compliance Certification) paragraph (a) has been revised to clarify that the initial certification is from the date of issuance until December 31. Paragraph (c) has been revised to provide greater consistency with the language in the rule.

#### B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent The certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;

- (4) The methods used for determining **the** compliance **status** of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- 8. B.12 (Preventive Maintenance Plan) has been revised to include new paragraph (d) which clarifies the record keeping requirements associate with this condition.
- B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
  - (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
    - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
    - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions: and
    - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond it's the **Permittee's** control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

9. B.13 (Emergency Provisions) has been revised at paragraph B.13(b)(5) to include a reference to the Emergency Occurrence Report Form. The emergency form is for emergencies only, and is no longer an emergency and deviation form. All deviations will now be reported on the Quarterly Deviation and Compliance Monitoring Report. Also, paragraph (d) has been revised to remove extraneous language, and in paragraph (f) "compliance" has been changed to "accordance."

# B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent notice, either in writing by mail or facsimile, of the emergency to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

10. B.14 (Permit Shield) has been updated to incorporate relevant language from previous condition B.1.

# B.14 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superceded by this permit.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (ed) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (fe) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (gf) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (hg) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

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- (th) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]
- 11. B.16 (Deviations from Permit Requirements and Conditions) has been revised to eliminate the requirement for sources to report deviations in 10 days. Sources are now required to report deviations quarterly on the Quarterly Deviation and Compliance Monitoring Report. References to the emergency report have been removed since deviations will no longer be reported on that form. Further there is no longer a 5% exception for reporting deviations, since the previous 10 day notification requirement has been changed to a less burdensome quarterly report.
- B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
  - (a) Deviations from any permit requirements (for emergencies see Section B Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. except for the failure to perform the monitoring or record the information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3)(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

- 12. B.19 (Permit Amendment or Modification) has been revised to be consistent with 326 IAC 2-7-4(f) and clarify that all such applications must be certified by the responsible official. EPA has also requested this change.
- B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
  - (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
  - (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- 13. B.21 (Operational Flexibility) paragraph (b) has been revised to eliminate paragraph (b)(1) to be consistent with the language in the rule.
- B.21 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
  - (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). and the following additional conditions:
    - (1) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).
    - For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
      - (A)(1) A brief description of the change within the source;
      - (B)(2) The date on which the change will occur;
      - (C)(3) Any change in emissions; and
      - (D)(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- 14. B.22 (Source Modification Requirement) has been revised to include the 326 IAC 2 rule citation for completeness, and the phrase "applicable provisions" is unnecessary and has been removed.
- B.22 Source Modification Requirement [326 IAC 2] [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the applicable provisions of **326 IAC 2 and** 326 IAC 2-7-10.5.

15. B.23 (Inspection and Entry) has been revised to eliminate the phrase "At reasonable times" since there is neither a rule nor statute limiting accessibility to such information and data as specified in the condition.

# B.23 Inspection and Entry [326 IAC 2-7-6(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

  [326 IAC 2-7-6(6)]
- 16. B.24 (Transfer of Ownership or Operational Control) has been revised to be consistent with 326 IAC 2-7-4(f) and clarify that all such applications must be certified by the responsible official. EPA has also requested this change.

# B.24 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- 17. B.25 (Annual Fee Payment) paragraph (a) has been revised to include the appropriate rule cite.

# B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. **Pursuant 326 IAC 2-7-19(b),** if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.
- 18. C.6 (Operation of Equipment) has been revised to clarify the requirements of the condition.

# C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided **by statute**, **rule**, **or** in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

- 19. C.7 (Stack Height) has been revised to clarify which parts of 326 IAC 1-7 are not federally enforceable.
- 20. C.8 (Asbestos Abatement Projects) has been revised to provide a more accurate rule cite.
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140] [40 CFR 61, Subpart M]
- 21. C.9 (Performance Testing) has been revised such that "within" has been changed to "not later than" for purposes of providing greater clarity.

# C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within not later than five (5) days prior to the end of the initial forty-five (45) day period.
- 22. C.11 (Compliance Monitoring) has been revised to clarify that the permit will specify those instances when compliance monitoring is not required to commence within a 90 day period of permit issuance. Otherwise, compliance monitoring will be required to start within the 90 day time-frame stated in the condition.

# C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

23. C.12 (Monitoring Methods) has been revised to provide additional appropriate rule cites.

# C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, **40 CFR 60 Appendix B, 40 CFR 63,** or other approved methods as specified in this permit.

- 24. C.13 (Pressure Gauge Specifications) has been revised to provide appropriate rule cites, and language has been added for other instrument specifications.
- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
  - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

- (b) Whenever a condition in this permit requires the measurement of a flow rate the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.
- 25. C.15 (Risk Management Plan) has been updated to revised the compliance schedule submission date for sources subject to the RMP requirements of 40 CFR 68.
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

  If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:
  - (a) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (c) A verification to IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- 26. C.16 (Compliance Monitoring Plan Failure to Take Response Steps) has been revised to more clearly state the requirements of the condition.
- C.16 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]
  - (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole **of** information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
    - (1) This condition;
    - (2) The Compliance Determination Requirements in Section D of this permit;
    - (3) The Compliance Monitoring Requirements in Section D of this permit;

- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
  - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
  - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps shall may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.; or
  - (3) An automatic measurement was taken when the process was not operating.; or
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.

- At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides such failure providing adequate justification is documented and documents that such failures do not exceed five percent (5%) of the operating time in any quarter.
- (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.
- 27. C.17 (Actions Related to Noncompliance Demonstrated by a Stack Test) has been revised such that "corrective actions" has been changed to "response actions" to be consistent with the rest of the permit.
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
  - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
    permit, the Permittee shall take appropriate corrective response actions. The Permittee
    shall submit a description of these corrective response actions to IDEM, OAQ, within
    thirty (30) days of receipt of the test results. The Permittee shall take appropriate action
    to minimize excess emissions from the affected facility while the corrective response
    actions are being implemented.
- 28. C.18 (Emission Statement) has been revised such that "estimated" is added to (a)(1) and (a)(2) to be consistent with the description of emissions as provided in 326 IAC 2-6.
- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
  - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
    - (1) Indicate **estimated** actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
    - (2) Indicate **estimated** actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- 29. C.19 (General Record Keeping Requirements) has been revised such that requirements of the condition are general; "reports" has been added to clarify that the source must keep copies of those as well; and extraneous language has been removed.
- C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
  - (a) Records of all required monitoring data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
  - (b) Records of required monitoring information shall include, where applicable:

- Permit Reviewer: PR/EVP
  - The date, place, and time of sampling or measurements; <del>(1)</del>
  - The dates analyses were performed:
  - The company or entity performing the analyses;
  - The analytic techniques or methods used;
  - The results of such analyses; and
  - The operating conditions existing at the time of sampling or measurement.
  - Support information shall include, where applicable:
    - Copies of all reports required by this permit;
    - All original strip chart recordings for continuous monitoring instrumentation;
    - All calibration and maintenance records:
    - Records of preventive maintenance.
  - <del>(d)</del>(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- 30. C.20 (General Reporting Requirements) has been revised such that the Semi-Annual Compliance Monitoring Report is referred to as the Quarterly Deviation and Compliance Monitoring Report. References to the emergency report has been removed from this condition and, instead, placed into Condition B.13. Paragraph (d) has been revised to clarify that the report does need to be certified by the responsible official, and this change is also reflected in all the D sections and the reporting forms. EPA has also requested this change.
- C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
  - To affirm that the source has met all the compliance monitoring requirements stated in this permit The source shall submit a the attached Semi-annual quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from the permit requirements, and, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
  - (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any Semi-annual quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do-not-require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g)(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.
- 31. Emergency/Deviation Occurrence Report Form has been revised and is now called the Emergency Occurrence Report. All references to deviations have been removed. These forms should be sent to the Compliance Branch, not the Compliance Data Section as previously noted. The 2 day notification can now be submitted to the Compliance Branch without the responsible official certification, as long as the emergencies are included in the Quarterly Deviation and Compliance Monitoring Report. That report is certified by the responsible official and, therefore, will comply with the Part 70 requirement to have all reports certified.

Flint Ink North America Corporation New Albany, Indiana Permit Reviewer: PR/EVP

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT Office of Air Quality

## COMPLIANCE DATA SECTION BRANCH

P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674

Fax: 317-233-5967

## **PART 70 OPERATING PERMIT EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Flint Ink North America Corporation

Source Address: 800 Industrial Blvd., New Albany, IN, 47150 800 Industrial Blvd., New Albany, IN, 47150 Mailing Address:

Part 70 Permit No.: T043-7305-00012

his form consists of 2 pages	Page 1 of 2
Check either No. 1 or No.2	
9 1. This is an emergency as defined in 326 IAC 2-7-1(12)	
C The Permittee must notify the Office of Air Quality (OAQ), whours (1-800-451-6027 or 317-233-5674, ask for Complian	
C The Permittee must submit notice in writing by mail or by fa (Facsimile Number: 317-233-5967), and follow the other re 7-16	
9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(C)  C The Permittee must submit notice in writing within ten (10)	calendar days

## If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency <del>/Deviation</del> :
Describe the cause of the Emergency <del>/Deviation</del> :

If any of the following are not applicable	, mark N/A	Page 2 of 2
Date/Time Emergency <del>/Deviation</del> starte	ed:	
Date/Time Emergency <del>/Deviation</del> was o	corrected:	
Was the facility being properly operate Describe:	d at the time of the emergency/ <del>deviation</del> ?	Y N
Type of Pollutants Emitted: TSP, PM-1	0, SO <sub>2</sub> , VOC, NO <sub>X</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitt	ed during emergency <del>/deviation</del> :	
Describe the steps taken to mitigate th	e problem:	
Describe the corrective actions/respon	se steps taken:	
Describe the measures taken to minim	ize emissions:	
	y continued operation of the facilities are necenage to equipment, substantial loss of capital stantial economic value:	
Form Completed by:		
Title / Position:		
Date:		
Phone:		
	A certification is not required for this report.	

32. The Quarterly or Semi-Annual Compliance Monitoring Report has been revised and is now called the Quarterly Deviation and Compliance Monitoring Report. The form requires the source to not only report that there were deviations, but to also include the probable cause and the response steps taken. Every source will need to submit this report quarterly, except for sources with an applicable requirement with an alternate schedule for reporting deviations. Those sources will report deviations according to the schedule in the applicable requirement.

Flint Ink North America Corporation New Albany, Indiana Permit Reviewer: PR/EVP

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT Office of Air Quality COMPLIANCE DATA SECTION

# **PART 70 OPERATING PERMIT**

# QUARTERLY DEVIATION and COMPLIANCE MONITORING REPORT

Source Name:		North America Cor		
Source Address: Mailing Address:		strial Blvd., New Al strial Blvd., New Al		
Part 70 Permit No.:	T043-730		bany, n4, 17 100	
Months:	to	Vear:		
				Page 1 of
stated in this permit deviation from the control probable cause of following exceptions shall be reported a need to be included be supplemented by	This report ompliance method deviations: Deviations coording to din this reportations that the method in this reportations the method din this reportations are method din this reportation did not be method d	shall be submitted to the shall be submitted to the responsion, and the responsion that are required the schedule state ort. Additional parts Emergency/Device the schedule state ort.	d quarterly based nents, and the danse steps taken d to be reported ted in the application Occurrence	nce monitoring requirements on a calendar year. Any te(s) of each deviation, the must be reported. with the by an applicable requirement cable requirement and do not ched if necessary. This form can e Report. If no deviations of this reporting period.
9 NO DEVIATIONS	OCCURRE	D THIS REPORTII	NG PERIOD.	
9 THE FOLLOWING	G DEVIATIO	NS OCCURRED T	HIS REPORTIN	G PERIOD
Compliance Monit	<del>oring</del> Perm	it Requirement (	specify permit co	ndition #)
Date of <del>each</del> Devia	tion:		Duration of De	eviation:
Number of Deviation	ons:			
Probable Cause	of Deviat	ion:		
Response Step	s Taken:			
Compliance Monit	<del>oring</del> Perm	it Requirement (s	specify permit co	ndition #)
Date of <del>each</del> Devia	tion:		Duration of De	eviation:
Number of Deviation	ons:		•	
Probable Cause	of Deviat	ion:		
Response Step	s Taken:			

Flint Ink North America Corporation New Albany, Indiana Permit Reviewer: PR/EVP Page 29 of 29 T043-7305-00012

Page 2 of 2

	Page A	2 01 2
Compliance Monitoring Permit Requireme	ent (specify permit condition #)	
Date of <del>each</del> Deviation:	Duration of Deviation:	
Number of Deviations:		
Probable Cause of Deviation:		
Response Steps Taken:		
Compliance Monitoring Permit Requireme	ent (specify permit condition #)	
Date of <del>each</del> Deviation:	Duration of Deviation:	
Number of Deviations:		
Probable Cause of Deviation:		
Response Steps Taken:		
Compliance Monitoring Permit Requireme	ent (specify permit condition #)	
Date of <del>each</del> Deviation:	Duration of Deviation:	
Number of Deviations:		
Probable Cause of Deviation:		
Response Steps Taken:		
Form Completed By:		
Title/Position:		
Date:		
Phone:		

Attach a signed certification to complete this report.

Page 1 of 16 TSD App A

Company Name: Flint Ink North America Corporation

Address, City IN Zip: 800 Industrial Blvd., New Albany, IN 47150-2290

**Title V:** 043-7305-00012 Reviewer: Phillip Ritz/EVP Date: December 15, 1998

# **Uncontrolled Potential Emissions (tons/year)**

Pollutant	Natural Gas Combustion	Tanks	Ink Storage	Piping	Dry Materials  Handling	Ink Loading	TOTAL
PM	0.63	0.00	0.00	0.00	146.00	0.00	146.
PM10	0.63	0.00	0.00	0.00	0.11	0.00	0.
SO2	2.22	0.00	0.00	0.00	0.00	0.00	2.
NOx	6.26	0.00	0.00	0.00	0.00	0.00	6.
VOC	0.11	29.25	27.06	1.78	0.00	5.96	64
CO	1.56	0.00	0.00	0.00	0.00	0.00	1.
total HAPs	0.00	28.83	26.64	0.00	0.00	5.81	61
vorst case single HAP	0.00	28.18 (toluene)	26.08 (toluene)	0.00	0.00	5.64 (toluene)	59.90 (tolue

## **Controlled Potential Emissions (tons/year)**

			Emissions Generati	ng Activity			
Pollutant	Natural Gas Combustion	Tanks	Ink Storage	Piping	Dry Materials Handling	Ink Loading	TOTAL
PM	0.63	0.00	0.00	0.00	7.30	0.00	7.93
PM10	0.63	0.00	0.00	0.00	0.11	0.00	0.74
SO2	2.22	0.00	0.00	0.00	0.00	0.00	2.22
NOx	6.26	0.00	0.00	0.00	0.00	0.00	6.26
VOC	0.11	29.25	27.06	1.78	0.00	5.96	64.16
CO	1.56	0.00	0.00	0.00	0.00	0.00	1.56
total HAPs	0.00	28.83	26.64	0.00	0.00	5.81	61.28
worst case single HAP	0.00	28.18 (toluene)	26.08 (toluene)	0.00	0.00	5.64 (toluene)	59.90 (toluene)

Total emissions based on rated capacity at 8,760 hours/year, after control.

Page 2 of 16 TSD App A

Company Name: Flint Ink North America Corporation
Address, City IN Zip: 800 Industrial Bivd., New Albany, IN 47150-2290
Title V: 043-7305-00012
Reviewer: Phillip RitizEVP

										<u> </u>						
	Diameter	Height	Maximum Liquid Height	Volume	Working Volume	Vent Setting (press/vac,	Maximum Temperature	Minimum Temperature	Vapor Molecular Weight	Vapor Pressure of Volatile Organics	Typical Throughput	Typical Throughput	Percent VOC	VOC Throughput	Tank Turnovers	1/00
Tank ID	(feet)	(feet)	(feet)	(gallons)	(gallons)	(psi)	(degree F)	(degree F)	(lb/lbmol)	(psi @ 68 F)	(pounds)	(gallons)	(volume)	(gallons)	Product	VOC
Tank Far																
S-1	20	24.3	21	57074	49323	0.0625	66.1	46.2	92.13	0.4217	4,356,766	602,846	100.00%	602,846	12.2	12.2
3-2	20	24.3	21	57074	49323	0.0625	66.1	46.2	92.13	0.4217	2,138,103	295,849	100.00%	295,849	6.0	6.0
3-3	12	32	29.5	27057	24943	0.0625	66.1	46.2	92.13	0.4217	2,138,103	295,849	100.00%	295,849	11.9	11.9
3-4	12	32	29.5	27057	24943	0.0625	66.1	46.2	92.13	0.4217	348,364	47,984	100.00%	47,984	1.9	1.9
3-5	12	27	23.5	22830	19870	0.0625	66.1	46.2	92.13	0.4217	2,780,520	453,370	100.00%	453,370	22.8	22.8
8-6	12	27	23.5	22830	19870	0.0625	66.1	46.2	92.13	0.4217	2,138,103	295,849	100.00%	295,849	14.9	14.9
3-7	12	27	23.5	22830	19870	0.0625	66.1	46.2	92.13	0.4217	3,817,472	528,224	100.00%	528,224	26.6	26.6
	rial Storag															
/-10	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	1,086,898	134,185	47.00%	63,067	7.2	3.4
/-11	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	1,176,474	145,244	47.00%	68,265	7.8	3.7
/-12	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	639,601	78,963	47.00%	37,113	4.2	2.0
/-13	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	890,228	109,905	47.00%	51,655	5.9	2.8
/-14	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	2,563,000	326,913	64.43%	210,630	17.6	11.3
/-15	11	16	14	11368	9947	0.0625	75	65	92.13	0.4217	1,381,000	163,820	32.00%	52,422	16.5	5.3
-16	11	16	14	11368	9947	0.0625	75	65	92.13	0.4217	288,141	35,573	47.00%	16,719	3.6	1.7
Raw Mate	erial Storag	e ("A" Depar	tment)													
/-17	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	5.673.807	700.470	47.00%	329.221	37.7	17.7
/-18	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	1.176.474	145,244	47.00%	68,265	7.8	3.7
/-19	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	245.000	15,255	33.41%	5.097	0.8	0.3
/-20	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	947,000	58,966	33.41%	19,701	3.2	1.1
/-21	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	524,000	66,837	64.43%	43,063	3.6	2.3
/-22	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	232.000	29.592	64.43%	19.066	1.6	1.0
/-23	12	22	22	18602	18602	0.0625	75	65	92.13	0.4217	7,518,000	928,148	47.00%	436,230	49.9	23.5
remixer	s (Mill Room	m)														
M-20	6.5	9	6	2233	1489	0.046875	75	65	92.13	0.4217	1.242.000	77,335	33.41%	25.838	51.9	17.4
M-21	6.5	9	6	2233	1489	0.046875	75	65	92.13	0.4217	150.000	9.340	33.41%	3.120	6.3	2.1
M-22	6	7	6	1480	1268	0.046875	75	65	92.13	0.4217	756.000	96.429	64.43%	62.129	76.0	49.0
M-23	6	7	5	1480	1057	0.046875	75	65	92.13	0.4217	3.123.510	337.312	52.53%	177.190	319.1	167.6
M-24	6	7	5	1480	1057	0.046875	75	65	92.13	0.4217	3.123.510	337.312	52.53%	177.190	319.1	167.6
M-25	6	7	5	1480	1057	0.046875	75	65	92.13	0.4217	1,468,604	159,979	55.81%	89,284	151.4	84.5
M-26	6	7	5	1480	1057	0.046875	75	65	92.13	0.4217	1.468.604	159.979	55.81%	89.284	151.4	84.5
PM-27	6	7	5	1480	1057	0.046875	75	65	92.13	0.4217	2,491,000	257,335	60.93%	156,794	243.5	148.
PM-28	6	7	5	1480	1057	0.046875	75	65	92.13	0.4217	2,491,000	257,335	60.93%	156,794	243.5	148.
M-29	6	7	5	1480	1057	0.046875	75	65	92.13	0.4217	5,367,029	572,789	60.93%	349,000	541.9	330.2
PM-30	6	7	5	1480	1057	0.046875	75	65	92.13	0.4217	5,367,029	572,789	60.93%	349,000	541.9	330.2
Ioldina T	anks (Mill	Poom)											-			
T-20	6	11.5	11.5	2431	2431	0.03125	75	65	92.13	0.4217	1.500.000	93.400	33.41%	31.205	38.4	12.8
IT-21	6	11.5	11.5	2431	2431	0.03125	75	65	92.13	0.4217	257.539	32,477	32.00%	10.392	13.4	4.3
IT-23	6	11.5	11.5	2431	2431	0.03125	75	65	92.13	0.4217	3,123,510	337,312	52.53%	177,190	138.8	72.9
1T-24	6	11.5	11.5	2431	2431	0.03125	75	65	92.13	0.4217	3.123.510	337,312	52.53%	177,190	138.8	72.9
	<b>⊢</b>			2.101	2-101	2.00.20			02.10	0.72.17	2,120,010	201,012	-L.00 /0	.,,,,,,,,,	.00.0	

Appendix A: Emission Calculations Page 3 of 16 TSD App A

Company Name: Flint Ink North America Corporation
Address, City IN Zip: 800 Industrial Bivd., New Albany, IN 47150-2290
Title V: 043-7305-00012
Reviewer: Phillip RitizEVP

	т т									1						
			Maximum		Working	Vent Setting	Maximum	Minimum	Vapor Molecular	Vapor Pressure	Totalest	Totalest	Percent	VOC	Tank	
	Diameter	Height	Liquid Height	Volume	Volume	(press/vac.	Temperature	Temperature		of Volatile Organics	Typical Throughput	Typical Throughput	VOC	Throughput	Turnovers	ı 1
Tank ID	(feet)	(feet)	(feet)	(gallons)	(gallons)	(psi)	(degree F)	(degree F)	(lb/lbmol)	(psi @ 68 F)	(pounds)	(gallons)	(volume)	(gallons)	Product	VOC
HT-26	6	11.5	11.5	2431	2431	0.03125	75	65	92.13	0.4217	2,937,208	319,957	55.81%	178,568	131.6	73.5
HT-28	6	11.5	11.5	2431	2431	0.03125	75	65	92.13	0.4217	4,982,002	514,670	60.93%	313,588	211.7	129.0
HT-29	6	11.5	11.5	2431	2431	0.03125	75	65	92.13	0.4217	5,367,029	572,789	60.93%	349,000	235.6	143.6
HT-30	6	11.5	11.5	2431	2431	0.03125	75	65	92.13	0.4217	5,367,029	572,789	60.93%	349,000	235.6	143.6
																$\vdash$
Blenders	0.5	40	44.0	5091	5006	0.00405	76	05	00.00	0.4455	5 445 450	000 000	63.02%	202 704	404.7	70.7
B-40 B-41	8.5 8.5	12	11.8 11.8	5091	5006	0.03125	75 75	65 65	92.26 92.26	0.4155 0.4155	5,115,450 5.115.450	608,982 608,982	63.02%	383,781 383,781	121.7 121.7	76.7 76.7
B-41 B-42	8.5	12	11.8	5091	5006	0.03125	75	65	92.20	0.4135	3,897,898	424,608	61.85%	262,620	84.8	52.5
B-43	8.5	12	11.8	5091	5006	0.03125	75	65	92.31	0.4135	4.257.995	514,872	61.85%	318,449	102.9	63.6
B-44	8.5	12	11.8	5091	5006	0.03125	75	65	92.31	0.4135	4.257.995	514.872	61.85%	318,449	102.9	63.6
B-45	8.5	12	11.8	5091	5006	0.03125	75	65	92.31	0.4134	3.892.503	470.678	62.03%	291.961	94.0	58.3
B-46	8.5	12	11.8	5091	5006	0.03125	75	65	92.31	0.4134	3,892,503	470,678	62.03%	291,961	94.0	58.3
B-47	8.5	12	11.8	5091	5006	0.03125	75	65	92.31	0.4134	3,892,503	470,678	62.03%	291,961	94.0	58.3
B-48	8.5	12	11.8	5091	5006	0.03125	75	65	92.17	0.4185	5,997,581	745,041	68.69%	511,769	148.8	102.2
B-49	8.5	12	11.8	5091	5006	0.03125	75	65	92.17	0.4185	5,997,581	745,041	68.69%	511,769	148.8	102.2
B-50	8.5	12	11.8	5091	5006	0.03125	75	65	92.17	0.4185	5,997,581	745,041	68.69%	511,769	148.8	102.2
																-
Blenders				0500	0500	0.000	75	65	92.31	0.4404		044.450	00 000/	101100	01.5	F0.4
B-51 B-52	7	9	8.7 8.7	2589 2589	2503 2503	0.0625	75	65	92.31	0.4134 0.4155	1,748,741	211,456 22.304	62.03% 63.02%	131,166 14.056	84.5 8.9	52.4 5.6
B-52 B-53	7	9	8.7	2589	2503	0.0625	75	65	92.20	0.4135	1.683.280	203.541	61.85%	125.890	81.3	50.3
B-53 B-54	7	9	8.7	2589	2503	0.0625	75	65	92.37	0.4185	121.207	15.057	68.69%	10.342	6.0	4.1
B-55	9	12	12	5707	5707	0.03125	75	65	92.26	0.4155	5.115.450	608.982	63.02%	383.781	106.7	67.2
B-56	9	12	12	5707	5707	0.03125	75	65	92.26	0.4155	5.115.450	608.982	63.02%	383,781	106.7	67.2
B-57	9	12	12	5707	5707	0.03125	75	65	92.26	0.4155	5.115.450	608.982	63.02%	383.781	106.7	67.2
B-58	9	12	12	5707	5707	0.03125	75	65	92.31	0.4132	8,938,640	1,168,450	70.62%	825,159	204.7	144.6
B-59	9	12	12	5707	5707	0.03125	75	65	92.31	0.4132	8,938,640	1,168,450	70.62%	825,159	204.7	144.6
B-60	9	12	12	5707	5707	0.03125	75	65	92.31	0.4132	8,658,607	1,131,844	70.62%	799,308	198.3	140.1
																-
F-104	age ("A" [] 8.5	12 12	11.9	5091	5048	0.0625	75	65	92.13	0.4217	1.237.050	127.794	60.93%	77.865	25.3	15.4
F-104 F-105	8.5	12	11.9	5091	5048	0.0625	75	65	92.13	0.4217	3.269.457	353.073	52.53%	185,469	69.9	36.7
F-105	8.5	12	11.9	5091	5048	0.0625	75	65	92.13	0.4217	2.000.000	217.865	55.81%	121,590	43.2	24.1
F-107	8.5	12	11.9	5091	5048	0.0625	75	65	92.13	0.4217	1.294.529	141.016	55.81%	78,701	27.9	15.6
F-108	8.5	12	11.9	5091	5048	0.0625	75	65	92.13	0.4217	1.998.506	217.702	55.81%	121.500	43.1	24.1
F-109	8.5	12	11.9	5091	5048	0.0625	75	65	92.13	0.4217	465,488	49.679	60.93%	30.269	9.8	6.0
F-110	8.5	12	11.9	5091	5048	0.0625	75	65	92.13	0.4217	2,856,144	295,056	60.93%	179,778	58.5	35.6
	Ink Storage	•														
F-61	9.5	17.25	17	9141	9009	0.0625	75	65	92.26	0.4155	1,388,786	165,332	63.02%	104,192	18.4	11.6
F-62	9.5	17.25	17	9141	9009	0.0625	75	65	92.26	0.4155	650,359	77,424	63.02%	48,792	8.6	5.4
F-63	9.5	17.25	17	9141	9009	0.0625	75	65	92.26	0.4155	847,596	100,904	63.02%	63,590	11.2	7.1
F-64 F-65	9.5 9.5	17.25 17.25	17 17	9141 9141	9009	0.0625	75 75	65 65	92.26 92.31	0.4155 0.4135	1,980,816 681.072	235,811 82.355	63.02% 61.85%	148,608 50.936	26.2 9.1	16.5 5.7
F-66	9.5	17.25	17	9141	9009	0.0625	75 75	65	92.31	0.4135	978.264	118,291	61.85%	73.163	9.1	8.1
[F-00	9.5	17.25	17	9141	9009	U.U020	/5	00	92.31	U.4135	9/8,204	110,291	U1.65%	1 /3,103	13.1	0.1

Appendix A: Emission Calculations Page 4 of 16 TSD App A

Company Name: Flint Ink North America Corporation
Address, City IN Zip: 800 Industrial Bivd., New Albany, IN 47150-2290
Title V: 043-7305-00012
Reviewer: Phillip RitizEVP

	Diameter	Height	Maximum Liquid Height	Volume	Working Volume	Vent Setting (press/vac,	Maximum Temperature	Minimum Temperature		Vapor Pressure of Volatile Organics	Typical Throughput	Typical Throughput	Percent VOC	VOC Throughput	Tank Turnovers	
Tank ID	(feet)	(feet)	(feet)	(gallons)	(gallons)	(psi)	(degree F)	(degree F)	(lb/lbmol)	(psi @ 68 F)	(pounds)	(gallons)	(volume)	(gallons)	Product	VOC
F-67	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4135	978,264	118,291	61.85%	73,163	13.1	8.1
F-68	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4134	3,593,607	434,535	62.03%	269,542	48.2	29.9
F-69	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4134	932,942	112,810	62.03%	69,976	12.5	7.8
F-70	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4134	1,276,171	154,313	62.03%	95,721	17.1	10.6
F-71	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4134	1,587,198	191,922	62.03%	119,049	21.3	13.2
F-72	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4134	2,019,233	244,164	62.03%	151,455	27.1	16.8
F-73	9.5	17.25	17	9141	9009	0.0625	75	65	92.17	0.4185	2,050,908	254,771	68.69%	175,002	28.3	19.4
F-74	9.5	17.25	17	9141	9009	0.0625	75	65	92.17	0.4185	1,882,216	233,816	68.69%	160,608	26.0	17.8
F-75	9.5	17.25	17	9141	9009	0.0625	75	65	92.17	0.4185	2,941,819	365,443	68.69%	251,023	40.6	27.9
F-76	9.5	17.25	17	9141	9009	0.0625	75	65	92.17	0.4185	541,919	67,319	68.69%	46,242	7.5	5.1
F-77	9.5	17.25	17	9141	9009	0.0625	75	65	92.17	0.4185	2,342,502	290,994	68.69%	199,884	32.3	22.2
F-78	9.5	17.25	17	9141	9009	0.0625	75	65	92.17	0.4185	2,180,370	270,853	68.69%	186,049	30.1	20.7
F-79	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4132	2,686,665	351,198	70.62%	248,016	39.0	27.5
F-80	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4132	1,804,319	235,859	70.62%	166,563	26.2	18.5
-81	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4132	8,331,640	1,089,103	70.62%	769,125	120.9	85.4
F-82	9.5	17.25	17	9141	9009	0.0625	75	65	92.26	0.4155	50,000	5,952	63.02%	3,751	0.7	0.4
F-83	9.5	17.25	17	9141	9009	0.0625	75	65	92.26	0.4155	2,474,651	294,601	63.02%	185,658	32.7	20.6
F-84	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4135	875,938	105,918	61.85%	65,510	11.8	7.3
F-85	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4135	1,764,022	213,304	61.85%	131,928	23.7	14.6
F-86	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4132	457,592	59,816	70.62%	42,242	6.6	4.7
F-87	9.5	17.25	17	9141	9009	0.0625	75	65	92.31	0.4132	1,187,625	155,245	70.62%	109,634	17.2	12.2
Finished I	nk Storage	("A" Dept)														
F-88	10.5	16	15.5	10358	10034	0.0625	75	65	92.17	0.4185	1,351,031	167,830	68.69%	115,282	16.7	11.5
F-89	10.5	16	15.5	10358	10034	0.0625	75	65	92.17	0.4185	10,967,814	1,362,461	68.69%	935,875	135.8	93.3
F-90	10.5	16	15.5	10358	10034	0.0625	75	65	92.17	0.4185	10,967,814	1,362,461	68.69%	935,875	135.8	93.3
-91	10.5	16	15.5	10358	10034	0.0625	75	65	92.17	0.4185	10,967,814	1,362,461	68.69%	935,875	135.8	93.3
-92	10.5	16	15.5	10358	10034	0.0625	75	65	92.31	0.4135	380,534	46,014	61.85%	28,460	4.6	2.8
-93	10.5	16	15.5	10358	10034	0.0625	75	65	92.31	0.4135	1,874,723	226,690	61.85%	140,208	22.6	14.0
F-94	10.5	16	15.5	10358	10034	0.0625	75	65	92.31	0.4135	1,874,723	226,690	61.85%	140,208	22.6	14.0
F-95	10.5	16	15.5	10358	10034	0.0625	75	65	92.31	0.4135	525,323	63,522	61.85%	39,288	6.3	3.9
F-96	10.5	16	15.5	10358	10034	0.0625	75	65	92.26	0.4155	242,909	28,918	63.02%	18,224	2.9	1.8
F-97	10.5	16	15.5	10358	10034	0.0625	75	65	92.26	0.4155	2,714,076	323,104	63.02%	203,620	32.2	20.3
F-98	10.5	16	15.5	10358	10034	0.0625	75	65	92.26	0.4155	661,901	78,798	63.02%	49,658	7.9	4.9
F-99	10.5	16	15.5	10358	10034	0.0625	75	65	92.26	0.4155	405,504	48,274	63.02%	30,422	4.8	3.0
F-100	10.5	16	15.5	10358	10034	0.0625	75	65	92.31	0.4134	380,534	46,014	62.03%	28,542	4.6	2.8
F-101	10.5	16	15.5	10358	10034	0.0625	75	65	92.31	0.4134	892,899	107,968	62.03%	66,973	10.8	6.7
F-102	10.5	16	15.5	10358	10034	0.0625	75	65	92.31	0.4134	2,621,883	317,035	62.03%	196,657	31.6	19.6
F-103	10.5	16	15.5	10358	10034	0.0625	75	65	92.31	0.4134	2.621.883	317.035	62.03%	196.657	31.6	19.6

Appendix A: Emission Calculations Page 5 of 16 TSD App A

Company Name: Flint link North America Corporation
Address, City IN Zip: 800 Industrial Bivd., New Albany, IN 47150-2290
Title V: 043-7305-00012
Reviewer: Philip Ritz/EVP

Day Average						aht)	nts (By Wei	Compone	/apor C	Vai	T							Т		$\overline{}$	Vapor Pressure	Vapor Pressure	Vapor Pressure				
Temperature														Working Loss		Vented Vapor	Vapor Space			Daily Vapor	@ Daily Minimum	@ Daily Maximum	@ Daily Average	Daily Minimum	Daily Maximum	Daily Average	1
Table   Decree R   D	al Losses (lb/yr)	otal Losses	To			Percent	Percent				Total	Working	Standing	Product	Turnover	Saturation	Expansion	Vapor	Vapor Space	emperature	Liquid Surface	Liquid Surface	Liquid Surface	Liquid Surface	Liquid Surface	Liquid Surface	
Tan	Ethyl- To	Ethyl-					Ethyl-	Percent	F	Percent	Losses	Losses	Losses	Factor	Factor	Factor	Factor	Density	Volume	Range	Temperature	Temperature	Temperature	Temperature	Temperature	Temperature	
\$\frac{1}{52.4}\$  \text{ 517.40}  \text{ 522.2}  \text{ 512.47}  \text{ 0.3862}  \text{ 0.3803}   \text{ 0.000}  \text{ 0.000}  \text{ 0.000}  \text{ 0.000}  \text{ 0.000}  \text{ 0.000}   \text{ 0.000}  \text{ 0.000}  \text{ 0.000}   \text{ 0.000}  \text{ 0.000}   \text{ 0.000}  \text{ 0.000}   \text{ 0.000}   \text{ 0.000}   \text{ 0.000}   \text{ 0.000}   \text{ 0.000}   \text{ 0.000}    \text{ 0.000}   \text{ 0.000}   \qq   \qq  \qq\qq\qq\qq\qq\qq\qq\qq\qq\qq\qq\qq\qq	Benzene HA	Benzene	Xylene	luene		HAPs	Benzene	Xylene		Toluene	(lb/yr)	(lb/yr)	(lb/yr)	(unitless)	(unitless)	(unitless)	(unitless)	(lb/cu. ft.)	(cu. ft.)	(degree R)	(psi)	(psi)	(psi)	(degree R)	(degree R)	(degree R)	Tank ID
\$2   577.49   \$22.52   512.47   0.3082   0.3000   0.2025   20.12   1469.38   0.0051   0.0000000000000000000000000000000000																											Tank Farm
5-3 517.49 \$22.52 512.47 0.3052 0.3600 0.2025 20.12 375.52 0.0051 0.008892 0.949 1.00 1.00 1.00 24.58 32.44 5702 10.0055 10.00	0.00 481	0.00	0.00			96.00%	0.00%	0.00%	- 1	96.00%	501.59			1.00	1.00	0.929	0.036982	0.0051	1466.38	20.12	0.2625	0.3603	0.3082	512.47		517.49	S-1
\$4   517.49   522.52   512.47   0.3062   0.3063   0.2065   0.212   375.22   0.0061   0.036982   0.949   1.00   1.00   315.0   325.05   380.0   0.0076   0.00															1.00												S-2
\$5   517.49   522.52   512.47   0.3082   0.3603   0.2025   20.12   488.68   0.0051   0.036982   0.394   1.00   1.00   315.0   305.00   1.00582   0.0055   20.12   488.68   0.0051   0.036982   0.394   1.00   1.00   315.0   307.10   388.00   70.00%   4.00%   0.00%   20.224   0.000   0.00   0		0.00														0.949				20.12							S-3
8-6 517.49 522.52 512.47 0.3082 0.3803 0.2825 20.12 488.56 0.0051 0.05882 0.394 1.00 1.00 31.50 20.01 231.50 56.00% 0.00% 0.00% 50.00% 50.00% 50.00% 0.000 0.00 0.																											S-4
## ST 1749   \$22.52   \$12.47   \$0.3082   \$0.3080   \$0.2082   \$20.12   \$488.58   \$0.0051   \$0.008822   \$0.934   \$1.00   \$1.00   \$31.50   \$37.10   \$88.00   \$96.00%   \$0.00%   \$0.000%   \$37.00   \$0.00																											
Rew Material Storage V-10	0.00 222	0.00		2.24		96.00%	0.00%	0.00%		96.00%					1.00		0.036982	0.0051		20.12	0.2625	0.3603	0.3082			517.49	S-6
Vi-10   SS1-34   SS3-14   SS2-54   0.4699   0.4864   0.4465   72.0   92.92   0.0076   0.008273   0.980   1.00   1.00   2.09   65.00   67.99   100.00%   0.00	0.00 373	0.00	0.00	3.06		96.00%	0.00%	0.00%		96.00%	388.60	357.10	31.50	1.00	1.00	0.934	0.036982	0.0051	488.56	20.12	0.2625	0.3603	0.3082	512.47	522.52	517.49	S-7
Vi-10   SS1-34   SS3-14   SS2-54   0.4699   0.4864   0.4465   72.0   92.92   0.0076   0.008273   0.980   1.00   1.00   2.09   65.00   67.99   100.00%   0.00																											
Vi-1					-																						
V-12 S3134 S33.14 S29.54 0.4699 0.4695 0.4655 7.20 92.92 0.0076 0.008273 0.980 1.00 1.00 2.09 83.24 83.31 100.00% 0.00% 0.00% 0.00% 55.33 0.00 0.00 0.00 0.00 0.00 0.00 0.0												65.00															
V-13 S3134 S33.14 S29.54 0.4699 0.4695 7.20 92.92 0.0076 0.008273 0.980 1.00 1.00 2.09 83.24 55.33 100.00% 0.00% 0.00% 50.00% 55.33 0.00 0.00 0.00					$\perp$																						
V-14 531-34 533.14 529-54 0.4699 0.4954 0.4455 7.20 92.92 0.0076 0.008273 0.980 1.00 1.00 2.09 2.17.09 2.19.18 96.00% 0.00% 0.00% 0.00% 5.96.4 0.00 0.00 0.00					$\perp$																						
V-15 53134 533.14 529.54 0.4699 0.4954 0.4455 7.20 281.54 0.0076 0.008273 0.938 1.00 1.00 5.61 54.03 59.64 100.00% 0.00%					$\perp$																						
V-16 531-34 533.14 529.54 0.4699 0.4954 0.4455 7.20 281.54 0.0076 0.008273 0.980 1.00 1.00 5.61 17.23 22.84 100.00% 0.00% 100.00% 100.00% 22.84 0.00 0.00 1.00 1.00 1.00 1.00 1.00 1.0																											
Raw Material Storage ("A" Department) V-17																											
V-17	0.00 22.	0.00	0.00	2.84	_	100.00%	0.00%	0.00%		100.00%	22.84	17.23	5.61	1.00	1.00	0.936	0.008273	0.0076	261.54	7.20	0.4455	0.4954	0.4699	529.54	533.14	531.34	V-16
V-17		_	_		_				_		_																
N-18	0.00 341	0.00			_	100 000/	0.000/	0.000/		100.000/	011 11	000 00	0.00			0.000				7.00		0.1051	0.1000	E00 E4			
N-19																											
V20   S31.34   S33.14   S29.54   0.4699   0.4954   0.4455   7.20   92.92   0.0076   0.008273   0.980   1.00   1.00   2.09   42.31   22.93   92.25%   20.60   0.00					_		0.00%	0.00%				70.36	2.09														
V-21					_						7.34																
V-22 53134 533.14 529.54 0.4699 0.4954 0.4455 7.20 92.92 0.0076 0.008273 0.980 1.00 1.00 2.09 19.65 21.74 96.00% 0.00% 96.00% 96.00% 50.00 0.00 0.00 0.00 0.00 0.00 0.00					_																						
V-23					_																						
Permixers (Mill Room) PM-20 PM-21 PM-22 PM-23 PM-23 PM-23 PM-23 PM-24 PM-24 PM-24 PM-25 PM-25 PM-25 PM-26 PM-27 PM-28 PM-29 PM-30 PM																											
PM-20	0.00 451	0.00	0.00	11.70	_	100.00%	0.00%	0.00%		100.00%	431.70	449.01	2.09	1.00	1.00	0.900	0.000273	0.0076	92.92	1.20	0.4455	0.4934	0.4099	328.34	333.14	331.34	V-23
PM-20	-																									Room)	Premiyers (M
PM-21	0.00 664	0.00	0.00	4 53		92.25%	0.00%	0.00%	- 1	92.25%	720.36															1100)	
PM-22																											
PM-23																											
PM-24																											
PM-25																											
PM-26																											
PM-27	0.00 788	0.00	0.00	8.42		92.56%	0.00%	0.00%	- 1	92.56%	851.79																PM-26
PM-29 PM-30 S1128 B 95.65% 0.00% 0.00% 95.65% 2977.47 0.00 0.00 2 PM-30 S112.88 S5.65% 0.00% 0.00% 95.65% 2977.47 0.00 0.00 2 S1.00																											
PM-30   3112.88   95.65%   0.00%   0.00%   95.65%   2977.47   0.00   0.00   2 Holding Tanks (Mill Room)   HT-20   531.34   533.14   529.54   0.4699   0.4954   0.4455   7.20   11.61   0.0076   0.012666   0.990   1.00   1.00   0.40   32.16   32.57   92.25%   0.00%   0.00%   92.25%   30.04   0.00	0.00 1402	0.00	0.00	02.59		97.08%	0.00%	0.00%	- 1	97.08%	1444.78																PM-28
Holding Tanks (Mil Room) HT-20 531:34 533:14 529:54 0.4699 0.4954 0.4455 7.20 11.61 0.0076 0.012866 0.990 1.00 1.00 0.40 0.32:16 32:57 92:25% 0.00% 0.00% 92:25% 30.04 0.00 0.00 HT-21 531:34 533:14 529:54 0.4699 0.4954 0.4455 7.20 11.61 0.0076 0.012866 0.990 1.00 1.00 0.40 0.71 11.11 10.000% 0.00% 0.00% 11.11 0.00 0.00	0.00 2977	0.00	0.00	77.47		95.65%	0.00%	0.00%	- 1	95.65%	3112.88																PM-29
$\frac{H7.20}{17.21} - \frac{531.34}{533.14} - \frac{529.54}{529.54} - 0.4699 - 0.4954 - 0.4455 - 7.20 & 11.61 & 0.0076 & 0.012666 & 0.990 & 1.00 & 1.00 & 0.40 & 0.216 & 32.57 & 0.225\% & 0.00\% & 0.00\% & 92.25\% & 30.04 & 0.00 & 0.00 & 0.00\% &$	0.00 2977	0.00	0.00	77.47		95.65%	0.00%	0.00%		95.65%	3112.88																PM-30
$\frac{H7.20}{17.21} - \frac{531.34}{533.14} - \frac{529.54}{529.54} - 0.4699 - 0.4954 - 0.4455 - 7.20 & 11.61 & 0.0076 & 0.012666 & 0.990 & 1.00 & 1.00 & 0.40 & 0.216 & 32.57 & 0.225\% & 0.00\% & 0.00\% & 92.25\% & 30.04 & 0.00 & 0.00 & 0.00\% &$									-																		
HT-21 531.34 533.14 529.54 0.4699 0.4954 0.4455 7.20 11.61 0.0076 0.012666 0.990 1.00 1.00 0.40 10.71 11.11 100.00% 0.00% 100.00% 100.00% 11.11 0.00 0.00									-																		
		0.00	0.00															0.0076	11.61							531.34	HT-20
												10.71					0.012666										
			0.71			98.08%				97.69%	183.03	182.63			1.00	0.990	0.012666				0.4455	0.4954		529.54	533.14		HT-23
HT-24 531.34 533.14 529.54 0.4669 0.4954 0.4455 7.20 11.61 0.0076 0.012666 0.990 1.00 1.00 0.40 182.63 183.03 97.69% 0.39% 0.00% 98.08% 178.80 0.71 0.00	0.00 179	0.00	0.71	8.80		98.08%	0.00%	0.39%		97.69%	183.03	182.63	0.40	1.00	1.00	0.990	0.012666	0.0076	11.61	7.20	0.4455	0.4954	0.4699	529.54	533.14	531.34	HT-24

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				Vapor Pressure		Vapor Pressure				., .								r Componer							
	Daily Average	Daily Maximum	Daily Minimum		@ Daily Maximum	@ Daily Minimum				Vapor Space	Vented Vapor	1.	Working Loss				(Assumes s	ame ratio a				-			
	Liquid Surface Temperature	Temperature	Vapor Space Volume	Vapor Density	Expansion Factor	Saturation Factor	Turnover Factor	Product Factor	Standing			Percent	Percent	Percent	Percent		10	otal Losses (	Total	Total					
Tank ID	(degree R)	(degree R)	(degree R)	(psi)	(psi)	(psi)	Range (degree R)	(cu. ft.)	(lb/cu. ft.)	(unitless)	(unitless)	(unitless)	(unitless)	Losses (lb/vr)	(lb/vr)		Toluene	Xvlene		Total HAPs	Toluene	Xvlene	Benzene	HAPs	VOC
HT-26	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	11.61	0.0076	0.012666	0.990	1.00	1.00	0.40		184.45	92.56%	0.00%		92.56%	170.73	0.00	0.00	170.73	184.45
HT-28	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	11.61	0.0076	0.012666	0.990	1.00	1.00	0.40	323.21	323.61	97.08%			97.08%	314.16	0.00	0.00	314.16	323.61
HT-29	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	11.61	0.0076	0.012666	0.990	1.00	1.00	0.40	359.71	360.11	95.65%		0.00%	95.65%	344.45	0.00	0.00	344.45	360.11
HT-30	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	11.61	0.0076	0.012666	0.990	1.00	1.00	0.40	359.71		95.65%	0.00%	0.00%	95.65%	344.45	0.00	0.00	344.45	360.11
111-50	331.34	300.14	323.34	0.4000	0.4004	0.4400	7.20	11.01	0.0070	0.012000	0.550	1.00	1.00	0.40	333.71	300.11	33.0370	0.0070	0.0070	33.0370	344.43	0.00	0.00	344.43	300.11
Blenders																									
B-40	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	44.37	0.0075	0.012616	0.981	0.41	1.00	1.50	161.33	162.83	94.18%	2.48%	0.60%	97.26%	153.35	4.04	0.98	158.37	162.83
B-41	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	44.37	0.0075	0.012616	0.981	0.41	1.00	1.50	161.33	162.83	94.18%		0.60%	97.26%	153.35	4.04	0.98	158.37	162.83
B-42	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	44.37	0.0075	0.012602	0.981	0.52	1.00	1.49	138.42		93.89%		0.63%	97.00%	131.36	3.47	0.88	135.71	139.91
B-43	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	44.37	0.0075	0.012602	0.981	0.46	1.00	1.49	147.84	149.34	93.89%	2.48%	0.63%	97.00%	140.21	3.70	0.94	144.86	149.34
B-44	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	44.37	0.0075	0.012602	0.981	0.46	1.00	1.49	147.84	149.34	93.89%	2.48%	0.63%	97.00%	140.21	3.70	0.94	144.86	149.34
B-45	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	44.37	0.0075	0.012602	0.981	0.49	1.00	1.49	143.64	145.14	93.30%	2.21%	0.77%	96.28%	135.41	3.21	1.12	139.74	145.14
B-46	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	44.37	0.0075	0.012602	0.981	0.49	1.00	1.49	143.64	145.14	93.30%	2.21%	0.77%	96.28%	135.41	3.21	1.12	139.74	145.14
B-47	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	44.37	0.0075	0.012602	0.981	0.49	1.00	1.49	143.64	145.14	93.30%		0.77%	96.28%	135.41	3.21	1.12	139.74	145.14
B-48	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	44.37	0.0075	0.012637	0.981	1.00	1.00	1.51	523.70	525.21	94.98%	2.10%	0.69%	97.77%	498.84	11.03	3.62	513.50	525.21
B-49	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	44.37	0.0075	0.012637	0.981	1.00	1.00	1.51	523.70	525.21	94.98%	2.10%	0.69%	97.77%	498.84	11.03	3.62	513.50	525.21
B-50	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	44.37	0.0075	0.012637	0.981	1.00	1.00	1.51	523.70	525.21	94.98%	2.10%	0.69%	97.77%	498.84	11.03	3.62	513.50	525.21
Blenders ("A"																									
B-51	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	29.98	0.0075	0.008213	0.981	0.52	1.00	0.66	69.32	69.98	93.30%	2.21%		96.28%	65.29	1.55	0.54	67.38	69.98
B-52	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	29.98	0.0075	0.008226	0.981	1.00	1.00	0.66	14.30	14.96	94.18%		0.60%	97.26%	14.09	0.37	0.09	14.55	14.96
B-53	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	29.98	0.0075	0.008213	0.981	0.54	1.00	0.66	68.29	68.95	93.89%	2.48%	0.63%	97.00%	64.74	1.71	0.43	66.88	68.95
B-54	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	29.98	0.0075	0.008246	0.981	1.00	1.00	0.67	10.58	11.25	94.98%		0.69%	97.77%	10.69	0.24	0.08	11.00	11.25
B-55	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	39.20	0.0075	0.012616	0.985	0.45	1.00	1.33	174.81	176.14	94.18%	2.48%	0.60%	97.26%	165.89	4.37	1.06	171.32	176.14
B-56	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20 7.20	39.20	0.0075	0.012616	0.985	0.45	1.00	1.33		176.14 176.14	94.18%	2.48%	0.60%	97.26%	165.89	4.37	1.06	171.32 171.32	176.14 176.14
B-57 B-58	531.34 531.34	533.14 533.14	529.54 529.54	0.4630 0.4605	0.4882 0.4855	0.4390 0.4365	7.20	39.20 39.20	0.0075	0.012616 0.012602	0.985 0.985	1.00	1.00	1.33	835.15		94.18% 95.07%		0.60%	97.26% 98.15%	165.89 795.24	4.37 19.32	1.06 6.44	821.00	836.48
B-59	531.34	533.14	529.54	0.4605	0.4855	0.4365	7.20	39.20	0.0075	0.012602	0.985	1.00	1.00	1.32	835.15		95.07%	2.31%	0.77%	98.15%	795.24	19.32	6.44	821.00	836.48
B-60	531.34	533.14	529.54	0.4605	0.4855	0.4365	7.20	39.20	0.0075	0.012602	0.985	1.00	1.00	1.32	808.99		95.07%	2.31%		98.15%	770.37	18.72	6.24	795.32	810.31
D-00	331.34	300.14	323.34	0.4000	0.4000	0.4303	7.20	33.20	0.0073	0.012002	0.800	1.00	1.00	1.02	000.00	010.01	33.07 /0	2.5170	0.1170	30.1370	110.51	10.72	0.24	100.02	010.01
Base Storage	("A" Dept)																								
F-104	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	38.69	0.0076	0.008273	0.983	1.00	1.00	0.87	80.25	81.13	97.08%	0.00%	0.00%	97.08%	78.76	0.00	0.00	78.76	81.13
F-105	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	38.69	0.0076	0.008273	0.983	1.00	1.00	0.87	191.16		97.69%		0.00%	98.08%	187.60	0.75	0.00	188.35	192.03
F-106	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	38.69	0.0076	0.008273	0.983	1.00	1.00	0.87	125.32	126.19	92.56%	0.00%	0.00%	92.56%	116.80	0.00	0.00	116.80	126.19
F-107	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	38.69	0.0076	0.008273	0.983	1.00	1.00	0.87	81.12	81.99	92.56%	0.00%	0.00%	92.56%	75.89	0.00	0.00	75.89	81.99
F-108	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	38.69	0.0076	0.008273	0.983	1.00	1.00	0.87	125.23		92.56%	0.00%	0.00%	92.56%	116.72	0.00	0.00	116.72	126.10
F-109	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	38.69	0.0076	0.008273	0.983	1.00	1.00	0.87	31.20	32.07	95.65%	0.00%	0.00%	95.65%	30.68	0.00	0.00	30.68	32.07
F-110	531.34	533.14	529.54	0.4699	0.4954	0.4455	7.20	38.69	0.0076	0.008273	0.983	1.00	1.00	0.87	185.29	186.17	97.08%	0.00%	0.00%	97.08%	180.73	0.00	0.00	180.73	186.17
																1									
Finished Ink S																l		1				1			
F-61	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	63.81	0.0075	0.008226	0.978	1.00	1.00	1.40	105.97		94.18%	2.48%	0.60%	97.26%	101.12	2.66	0.64	104.43	107.37
F-62	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	63.81	0.0075	0.008226	0.978	1.00	1.00	1.40	49.62	51.03	94.18%	2.48%	0.60%	97.26%	48.06	1.27	0.31	49.63	51.03
F-63	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	63.81	0.0075	0.008226	0.978	1.00	1.00	1.40	64.67	66.08	94.18%	2.48%		97.26%	62.23	1.64	0.40	64.27	66.08
F-64	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	63.81	0.0075	0.008226	0.978	1.00	1.00	1.40	151.14	152.55	94.18%	2.48%	0.60%	97.26%	143.67	3.78	0.92	148.37	152.55
F-65	531.34 531.34	533.14 533.14	529.54 529.54	0.4608	0.4859 0.4859	0.4369	7.20 7.20	63.81	0.0075	0.008213	0.978 0.978	1.00	1.00	1.40	51.59 74.10	52.98 75.49	93.89% 93.89%	2.48%	0.63%	97.00% 97.00%	49.75 70.88	1.31	0.33	51.39 73.23	52.98 75.49
F-66	1 531.34	533.14	529.54	0.4608	0.4659	0.4369	1.20	03.81	0.0075	0.006213	0.978	1.00	1.00	1.40	/4.10	/ 5.49	93.89%	2.48%	0.63%	97.00%	70.88	1.87	0.48	13.23	/5.49

	Daily Average Liquid Surface	Daily Maximum Liquid Surface	Daily Minimum Liquid Surface	Liquid Surface	Liquid Surface	@ Daily Minimum Liquid Surface	Temperature	Vapor Space	Vapor	Vapor Space Expansion	Saturation	Turnover			Working	Assumes s Total	r Components (By V ame ratio as in the li	quid produc	Percent	Percent	Total Losses (lb/yr				
ank ID	Temperature (degree R)	Temperature (degree R)	Temperature (degree R)	Temperature (psi)	Temperature (psi)	Temperature (psi)	Range (degree R)	Volume (cu. ft.)	Density (lb/cu, ft.)	Factor (unitless)	Factor (unitless)	Factor (unitless)	Factor (unitless)	Losses (lb/yr)	Losses (lb/vr)	Losses (lb/vr)	Percent Toluene	Percent Xylene		Total HAPs	Toluene	Xvlene	Ethyl- Benzene	Total HAPs	Total VOC
-67	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	74.10	75.49	93.89%	2.48%		97.00%	70.88	1.87	0.48	73.23	75.49
-68	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	272.98	274.38	93.30%	2.21%		96.28%	256.00	6.06	2.11	264.17	274.38
-69	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	70.87	72.27	93.30%	2.21%	0.77%	96.28%	67.42	1.60	0.56	69.58	72.27
-70	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	96.94	98.34	93.30%	2.21%		96.28%	91.75	2.17	0.76	94.68	98.34
-71	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	120.57	121.97	93.30%	2.21%		96.28%	113.79	2.70	0.94	117.43	121.97
-72	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	153.39	154.79	93.30%	2.21%		96.28%	144.41	3.42	1.19	149.03	154.79
-73	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	63.81	0.0075	0.008246	0.978	1.00	1.00	1.42	179.08	180.50	94.98%	2.10%		97.77%	171.44	3.79	1.25	176.47	180.50
-74	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	63.81	0.0075	0.008246	0.978	1.00	1.00	1.42	164.35	165.77	94.98%	2.10%		97.77%	157.45	3.48	1.14	162.07	165.77
-75	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	63.81	0.0075	0.008246	0.978	1.00	1.00	1.42	256.87	258.29	94.98%	2.10%		97.77%	245.32	5.42	1.78	252.53	258.29
-76	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	63.81	0.0075	0.008246	0.978	1.00	1.00	1.42	47.32	48.74	94.98%	2.10%		97.77%	46.29	1.02	0.34	47.65	48.74
-77	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	63.81	0.0075	0.008246	0.978	1.00	1.00	1.42	204.54	205.96	94.98%	2.10%		97.77%	195.62	4.33	1.42	201.37	205.96
-78	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	63.81	0.0075	0.008246	0.978	1.00	1.00	1.42	190.39	191.80	94.98%	2.10%		97.77%	182.17	4.03	1.32	187.52	191.80
-79 -80	531.34	533.14	529.54 529.54	0.4605	0.4855	0.4365	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	251.02 168.58	252.42	95.07%	2.31%		98.15%	239.97	5.83	1.94	247.75	252.42
-81	531.34 531.34	533.14 533.14	529.54 529.54	0.4605	0.4855 0.4855	0.4365 0.4365	7.20 7.20	63.81 63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	778.44	169.98 779.84	95.07% 95.07%	2.31%		98.15% 98.15%	161.60 741.39	3.93 18.01	1.31 6.00	166.83 765.41	169.98 779.84
-82	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	3.82	5.22	94.18%	2.48%		97.26%	4.92	0.13	0.00	5.08	5.22
-83	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	63.81	0.0075	0.008226	0.978	1.00	1.00	1.40	188.82	190.23	94.18%	2.48%		97.26%	179.16	4.72	1 14	185.02	190.23
-84	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	66.35	67.74	93.89%			97.00%	63.60	1.68	0.43	65.71	67.74
-85	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	133.61	135.01	93.89%	2.48%		97.00%	126.76	3.35	0.85	130.96	135.01
-86	531.34	533.14	529.54	0.4605	0.4855	0.4365	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	42.75	44.15	95.07%	2.31%		98.15%	41.97	1.02	0.34	43.33	44.15
-87	531.34	533.14	529.54	0.4605	0.4855	0.4365	7.20	63.81	0.0075	0.008213	0.978	1.00	1.00	1.40	110.96	112.36	95.07%	2.31%		98.15%	106.82	2.60	0.87	110.28	112.36
inished lnk	Storage ("A" Dept	n																							-
-88	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	105.52	0.0075	0.008246	0.971	1.00	1.00	2.32	117.97	120.29	94.98%	2.10%	0.69%	97.77%	114.25	2.53	0.83	117.61	120.29
-89	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	105.52	0.0075	0.008246	0.971	1.00	1.00	2.32	957.69	960.01	94.98%	2.10%		97.77%	911.82	20.16	6.62	938.60	960.01
-90	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	105.52	0.0075	0.008246	0.971	1.00	1.00	2.32	957.69	960.01	94.98%	2.10%		97.77%	911.82	20.16	6.62	938.60	960.01
-91	531.34	533.14	529.54	0.4663	0.4916	0.4421	7.20	105.52	0.0075	0.008246	0.971	1.00	1.00	2.32	957.69	960.01	94.98%	2.10%		97.77%	911.82	20.16	6.62	938.60	960.01
-92	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	105.52	0.0075	0.008213	0.971	1.00	1.00	2.29	28.82	31.11	93.89%	2.48%	0.63%	97.00%	29.21	0.77	0.20	30.18	31.11
-93	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	105.52	0.0075	0.008213	0.971	1.00	1.00	2.29	142.00	144.29	93.89%	2.48%	0.63%	97.00%	135.47	3.58	0.91	139.96	144.29
-94	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	105.52	0.0075	0.008213	0.971	1.00	1.00	2.29	142.00	144.29	93.89%	2.48%		97.00%	135.47	3.58	0.91	139.96	144.29
-95	531.34	533.14	529.54	0.4608	0.4859	0.4369	7.20	105.52	0.0075	0.008213	0.971	1.00	1.00	2.29	39.79	42.08	93.89%			97.00%	39.51	1.04	0.27	40.82	42.08
-96	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	105.52	0.0075	0.008226	0.971	1.00	1.00	2.30	18.53	20.84	94.18%	2.48%		97.26%	19.63	0.52	0.13	20.27	20.84
-97	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	105.52	0.0075	0.008226	0.971	1.00	1.00	2.30	207.09	209.40	94.18%	2.48%		97.26%	197.21	5.19	1.26	203.66	209.40
-98	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	105.52	0.0075	0.008226	0.971	1.00	1.00	2.30	50.51	52.81	94.18%	2.48%		97.26%	49.74	1.31	0.32	51.36	52.81
-99	531.34	533.14	529.54	0.4630	0.4882	0.4390	7.20	105.52	0.0075	0.008226	0.971	1.00	1.00	2.30	30.94	33.25	94.18%	2.48%		97.26%	31.31	0.82	0.20	32.34	33.25
-100	531.34	533.14	529.54	0.4608	0.4858	0.4368	7.20	105.52	0.0075	0.008213	0.971	1.00	1.00	2.29	28.91	31.20 70.12	93.30%	2.21%	0.77%	96.28%	29.11	0.69	0.24	30.04	31.20
-101 -102	531.34 531.34	533.14 533.14	529.54 529.54	0.4608	0.4858 0.4858	0.4368 0.4368	7.20 7.20	105.52 105.52	0.0075	0.008213	0.971	1.00	1.00	2.29	67.83 199.17	201.46	93.30% 93.30%	2.21%		96.28% 96.28%	65.42 187.96	1.55 4.45	0.54 1.55	67.51 193.97	70.12 201.46
-102	531.34	533.14	529.54 529.54	0.4608	0.4858	0.4368	7.20	105.52	0.0075	0.008213	0.971	1.00	1.00	2.29		201.46	93.30%	2.21%		96.28%	187.96	4.45	1.55	193.97	201.46
- 103	1 331.34	555.14	J28.5 <del>4</del>	1 0.4008	U.#838	0.4308	1.20	100.52	0.00/5	0.008213	1 0.9/1	1.00	1.00	2.29	1 199.17	1201.40	93.30%	1 4.21%	0.77%	90.28%	107.90	4.45	1.00	193.97	201.46
																			Į.	Total lbs/yr	34,233.65	350.48	100.40	34,684.54	35,932.92
																			ī	Total tons/yr	17 12	0.18	0.05	17 34	17 97

Note: Tank emissions were calculated using the methodology for Organic Liquid Storage Tanks in AP-42 Section 7.1 except for the Premix Tanks. The Premix Tank emissions are based on an emission factor of 0.00058 lbs VIO21b product obtained during source testing at the Finit ink Corporation Warsaw facility in April 1996. The emissions from the Premix Tanks are vented to the atmosphere through the dust collection system bagbons (SV ID D-21).

Company Name: Flint Ink North America Corporation

Address, City IN Zip: 800 Industrial Blvd., New Albany, IN 47150-2290

**Title V:** 043-7305-00012 **Reviewer:** Phillip Ritz/EVP

Tank ID	Product Stored	Typical Throughput (pounds)	VOC Emission Factor (lb VOC/lb Product)	Typical VOC Emissions (lbs/yr))
		Raw Material Storag	e	
V-10	Resin	1,086,898	3.91E-06	4.25
V-11	Resin	1,176,474	3.91E-06	4.60
V-12	Resin	639,601	3.91E-06	2.50
V-13	Resin	890,228	3.91E-06	3.48
V-14	Gilsonite Slurry	2,563,000	3.91E-06	10.02
V-15	Polyamide	1,381,000	3.91E-06	5.40
V-16	Resin	288,141	3.91E-06	1.13
	Raw	v Material Storage ("A" De	epartment)	
V-17	Resin	5,673,807	3.91E-06	22.18
V-18	Resin	1,176,474	3.91E-06	4.60
V-19	Clay	245,000	3.91E-06	0.96
V-20	Clay	947,000	3.91E-06	3.70
V-21	Gilsonite	524,000	3.91E-06	2.05
V-22	Gilsonite	232,000	3.91E-06	0.91
V-23	Resin	7,518,000	3.91E-06	29.40

		Premixers (Mill Room)		
PM-20	Clay	1,242,000	2.00E-05	24.84
PM-21	Clay & Varnish	150,000	2.00E-05	3.00
PM-22	Gilsonite	756,000	2.00E-05	15.12
PM-23	Black Concentrate	3,123,510	2.00E-05	62.47
PM-24	Black Concentrate	3,123,510	2.00E-05	62.47
PM-25	Blue Concentrate	1,468,604	2.00E-05	29.37
PM-26	Blue Concentrate	1,468,604	2.00E-05	29.37
PM-27	Red Concentrate	2,491,000	2.00E-05	49.82
PM-28	Red Concentrate	2,491,000	2.00E-05	49.82
PM-29	Yellow Concentrate	5,367,029	2.00E-05	107.34
PM-30	Yellow Concentrate	5,367,029	2.00E-05	107.34
		Holding Tanks (Mill Room	) )	
HT-20	Clay	1,500,000	2.00E-05	30.00
HT-21	Dispersant	257,539	2.00E-05	5.15
HT-23	Black Concentrate	3,123,510	2.00E-05	62.47
HT-24	Black Concentrate	3,123,510	2.00E-05	62.47
HT-26	Blue Concentrate	2,937,208	2.00E-05	58.74
HT-28	Red Concentrate	4,982,002	2.00E-05	99.64
HT-29	Yellow Concentrate	5,367,029	2.00E-05	107.34
HT-30	Yellow Concentrate	5,367,029	2.00E-05	107.34

Company Name: Flint Ink North America Corporation

Address, City IN Zip: 800 Industrial Blvd., New Albany, IN 47150-2290

**Title V:** 043-7305-00012 **Reviewer:** Phillip Ritz/EVP

			VOC	Typical
		Typical	Emission	VOC
	Product	Throughput	Factor	Emissions
Tank ID	Stored	(pounds)	(lb VOC/lb Product)	(lbs/yr))
		Blenders		
B-40	Black Ink	5,115,450	2.00E-05	102.31
B-41	Black Ink	5,115,450	2.00E-05	102.31
B-42	Blue Ink	3,897,898	2.00E-05	77.96
B-43	Blue Ink	4,257,995	2.00E-05	85.16
B-44	Blue Ink	4,257,995	2.00E-05	85.16
B-45	Red Ink	3,892,503	2.00E-05	77.85
B-46	Red Ink	3,892,503	2.00E-05	77.85
B-47	Red Ink	3,892,503	2.00E-05	77.85
B-48	Yellow Ink	5,997,581	2.00E-05	119.95
B-49	Yellow Ink	5,997,581	2.00E-05	119.95
B-50	Yellow Ink	5,997,581	2.00E-05	119.95
		Blenders ("A" Dept)		
B-51	Red Ink	1,748,741	2.00E-05	34.97
B-52	Black Ink	187,357	2.00E-05	3.75
B-53	Blue Ink	1,683,280	2.00E-05	33.67
B-54	Yellow Ink	121,207	2.00E-05	2.42
B-55	Black Ink	5,115,450	2.00E-05	102.31

B-56	Black Ink	5,115,450	2.00E-05	102.31
B-57	Black Ink	5,115,450	2.00E-05	102.31
B-58	Extender	8,938,640	2.00E-05	178.77
B-59	Extender	8,938,640	2.00E-05	178.77
B-60	Extender	8,658,607	2.00E-05	173.17
		Base Storage ("A" Dept)		
F-104	Red Concentrate	1,237,050	3.91E-06	4.84
F-105	Black Concentrate	3,269,457	3.91E-06	12.78
F-106	Phthalo Blue Concentrate	2,000,000	3.91E-06	7.82
F-107	Malori Blue Concentrate	1,294,529	3.91E-06	5.06
F-108	Phthalo Blue Concentrate	1,998,506	3.91E-06	7.81
F-109	Yellow Concentrate	465,488	3.91E-06	1.82
F-110	Red Concentrate	2,856,144	3.91E-06	11.17
		Finished Ink Storage		
F-61	Black Ink	1,388,786	3.91E-06	5.43
F-62	Black Ink	650,359	3.91E-06	2.54
F-63	Black Ink	847,596	3.91E-06	3.31
F-64	Black Ink	1,980,816	3.91E-06	7.74
F-65	Blue Ink	681,072	3.91E-06	2.66
F-66	Blue Ink	978,264	3.91E-06	3.83
F-67	Blue Ink	978,264	3.91E-06	3.83
F-68	Red Ink	3,593,607	3.91E-06	14.05
F-69	Red Ink	932,942	3.91E-06	3.65

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# **Appendix A: Emission Calculations**

Company Name: Flint Ink North America Corporation

Address, City IN Zip: 800 Industrial Blvd., New Albany, IN 47150-2290

**Title V:** 043-7305-00012 **Reviewer:** Phillip Ritz/EVP

			VOC	Typical
		Typical	Emission	VOC
	Product	Throughput	Factor	Emissions
Tank ID	Stored	(pounds)	(lb VOC/lb Product)	(lbs/yr))
F-70	Red Ink	1,276,171	3.91E-06	4.99
F-71	Red Ink	1,587,198	3.91E-06	6.21
F-72	Red Ink	2,019,233	3.91E-06	7.90
F-73	Yellow Ink	2,050,908	3.91E-06	8.02
F-74	Yellow Ink	1,882,216	3.91E-06	7.36
F-75	Yellow Ink	2,941,819	3.91E-06	11.50
F-76	Yellow Ink	541,919	3.91E-06	2.12
F-77	Yellow Ink	2,342,502	3.91E-06	9.16
F-78	Yellow Ink	2,180,370	3.91E-06	8.53
F-79	Extender	2,686,665	3.91E-06	10.50
F-80	Extender	1,804,319	3.91E-06	7.05
F-81	Extender	8,331,640	3.91E-06	32.58
F-82	Black Ink	50,000	3.91E-06	0.20
F-83	Black Ink	2,474,651	3.91E-06	9.68
F-84	Blue Ink	875,938	3.91E-06	3.42
F-85	Blue Ink	1,764,022	3.91E-06	6.90
F-86	Extender	457,592	3.91E-06	1.79
F-87	Extender	1,187,625	3.91E-06	4.64
		Finished Ink Storage ("A"	Dent)	

F-88	Yellow Ink	1,351,031	3.91E-06	5.28
F-89	Yellow Ink	10,967,814	3.91E-06	42.88
F-90	Yellow Ink	10,967,814	3.91E-06	42.88
F-91	Yellow Ink	10,967,814	3.91E-06	42.88
F-92	Blue Ink	380,534	3.91E-06	1.49
F-93	Blue Ink	1,874,723	3.91E-06	7.33
F-94	Blue Ink	1,874,723	3.91E-06	7.33
F-95	Blue Ink	525,323	3.91E-06	2.05
F-96	Black Ink	242,909	3.91E-06	0.95
F-97	Black Ink	2,714,076	3.91E-06	10.61
F-98	Black Ink	661,901	3.91E-06	2.59
F-99	Black Ink	405,504	3.91E-06	1.59
F-100	Red Ink	380,534	3.91E-06	1.49
F-101	Red Ink	892,899	3.91E-06	3.49
F-102	Red Ink	2,621,883	3.91E-06	10.25
F-103	Red Ink	2,621,883	3.91E-06	10.25

Total 3,562

Total tons/yr 1.78

The emissions are based on an emission factors obtained during source testing at the Flint Ink Corporation Warsaw facility in April 1996.

The emissions from the piping network are vented through HV-1 through HV-4 and FV-1 through FV-4.

Appendix A: Emission Calculations: Ink Storage

Company Name: Flint Ink North America Corporation

Address, City IN Zip: 800 Industrial Blvd., New Albany, IN 47150-2290 Title V: 043-7305-00012

Reviewer: Phillip Ritz/EVP

Date: December 15, 1998

		Standing Loss	Working Loss				Total VOC				Toluene	1 1	Ethyl benzene	Total HAP
	Finished	Emissions	Emission Factor	Emissions	Total Loss		Emissions	Percent	Percent	Percent	Emissions	Emissions	Emissions	Emissions
Source	Product Throughput	(lb/yr)	(lb VOC/lb Finished Product)	(lb/yr)	Emissions	Source	(lb/yr)	Toluene	Xylene	Ethyl benzene	(lb/yr)	(lb/yr)	(lb/yr)	(lb/yr)
Storage Tanks						Storage Tanks		•						
S Series	97,937,859	700	1.73E-05	1,699	2,399	S Series	2,399	96.00%	4.00%	0.00%	2,303	96	0	2,399
V Series	97,937,859	100	1.45E-05	1,417	1,517	V Series	1,517	100.00%	0.00%	0.00%	1,517	0	0	1,517
PM Series	97,937,859		1.60E-04	15,688	15,688	PM Series	15,688	97.69%	0.39%	0.00%	15,326	61	0	15,387
HT Series	97,937,859	10	1.50E-05	1,472	1,482	HT Series	1,482	97.69%	0.39%	0.00%	1,447	6	0	1,453
3 Series	97,937,859	50	8.07E-05	7,904	7,954	B Series	7,954	94.98%	2.48%	0.77%	7,554	197	61	7,813
F Series (Base						F Series (Base								-
Storage)	97,937,859	10	8.48E-06	831	841	Storage)	841	94.98%	2.48%	0.77%	799	21	6	826
F Series (Final Product Storage)		100				F Series (Final Product Storage)								
Sitirage)	97,937,859	100	8.07E-05	7,904 Subtotal	8,004 37.883	Floudct Storage)	8,004	94.98%	2.48%	0.77%	7,602	198	62	7,862
		Emission		Subtotal	37,003									
		Factor (lb VOC/lb												
		Finished												
Process Piping		Product)				Process Piping								
						PreMixBlending								
PreMixBlending Area	97,937,859	3.10E-05			3,033	Area Product Storage	3,033	100.00%	0.00%	0.00%	3,033	0	0	3,033
Product Storage Area	97.937.859	5.41E-06			529	Area	529	100.00%	0.000/	0.00%	529	0	0	529
Toddel Olorage Area	91,931,009	3.41L-00		Subtotal	3.562	Aica	529	100.00%	0.00%	0.00%	529		0	529
Tanker Truck				Cubiciai	0,002	Tanker Truck								
Loading						Loading								
Product	97,937,859	1.27E-04			12,477	Product	12,477	94.98%	2.48%	0.77%	11,851	309	96	12,256
Recycled Solvent	1,469,068	1.40E-04			206	Solvent	206	100.00%	0.00%	0.00%	206	0	0	206
				Subtotal	12,683									
				Total	54,129					Total	52,166	889	225	53,281
			-	Total tons/vi	27.06					Total tons/vr	26.08	0.44	0.11	26.64

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#### Appendix A: Emission Calculations

Company Name: Flint Ink North America Corporation

Address, City IN Zip: 800 Industrial Blvd., New Albany, IN 47150-2290 Title V: 043-7305-00012

Reviewer: Phillip Ritz/EVP

Date: December 15, 1998

		Standing Loss	Working Loss				Total VOC				Toluene	Xylene	Ethyl benzene	Total HAP
	Finished	Emissions	Emission Factor	Emissions	Total Loss		Emissions	Percent	Percent	Percent	Emissions	Emissions	Emissions	Emissions
Source	Product Throughput	(lb/yr)	(lb VOC/lb Finished Product)	(lb/yr)	Emissions	Source	(lb/yr)	Toluene	Xylene	Ethyl benzene	(lb/yr)	(lb/yr)	(lb/yr)	(lb/yr)
Storage Tanks						Storage Tanks								
S Series	350,000,000	700	1.73E-05	6,072	6,772	S Series	6,772	96.00%	4.00%	0.00%	6,501	271	0	6,772
V Series	97,937,859	100	1.45E-05	1,417	1,517	V Series	1,517	100.00%	0.00%	0.00%	1,517	0	0	1,517
PM Series	97,937,859		1.60E-04	15,688	15,688	PM Series	15,688	97.69%	0.39%	0.00%	15,326	61	0	15,387
HT Series	97,937,859	10	1.50E-05	1,472	1,482	HT Series	1,482	97.69%	0.39%	0.00%	1,447	6	0	1,453
B Series	97,937,859	50	8.07E-05	7,904	7,954	B Series	7,954	94.98%	2.48%	0.77%	7,554	197	61	7,813
F Series (Base						F Series (Base								
Storage)	97,937,859	10	8.48E-06	831	841	Storage)	841	94.98%	2.48%	0.77%	799	21	6	826
F Series (Final Produc Storage)	97.937.859	100	8.07E-05	7.904	8.004	F Series (Final Product Storage)	8.004	94.98%	2.48%	0.77%	7.602	198	62	7,862
Otorage)	97,937,039	100	8.07E-05	Subtotal	42.256	1 Toddet Otorage)	0,004	94.96%	2.40%	U.7.7%	7,002	196	02	7,002
		Emission		- Cubicia.	.2,200									
		Factor												
		(lb VOC/lb												
		Finished												
Process Piping		Product)				Process Piping								
D 14: DI - 1: - 1		0.405.05				PreMixBlending								
PreMixBlending Area	97,937,859	3.10E-05			3,033	Area Product Storage	3,033	100.00%	0.00%	0.00%	3,033	0	0	3,033
Product Storage Area	97.937.859	5.41E-06			529	Area	529	100.00%	0.00%	0.00%	529	0	0	529
	07,007,000			Subtotal	3,562		OL0	100.0070	0.0070	0.0070	020		l v	020
Tanker Truck Loading						Tanker Truck Loading								
Product	97,937,859	1.27E-04			12,477	Product	12,477	94.98%	2.48%	0.77%	11,851	309	96	12,256
Recycled Solvent	1,469,068	1.40E-04			206	Solvent	206	100.00%	0.00%	0.00%	206	0	0	206
, 20170110	, , , , , , ,			Subtotal	12,683									
		•		,			•		•					
				Total	58,502					Total	56,364	1,064	225	57,654
			-	otal tons/vi	29.25	1				Total tons/yr	28 18	0.53	0.11	28.83

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#### Appendix A: Emission Calculations: Ink Loading

Company Name: Flint Ink North America Corporation

Address, City IN :800 Industrial Blvd., New Albany, IN 47150-2290 Title V: 043-7305-00012

Reviewer: Phillip Ritz/EVP

Date: December 15, 1998

LL = 12.46(SPM/T)

where LL = Loading Loss (lb/1000 gal)

S = Saturation Factor

P = Vapor Pressure of Liquid Loaded (psi)

M = Molecular Weight of Vapor (lb/lbmol)

T = Temperature of Bulk Liquid Loaded (degree R)

	Typical	Typical	Percent	VOC	Vapor	Vapor	Bulk Liquid	Saturation	Loading
	Throughput	Throughput	VOC	Throughput	Molecular Weight	Pressure	Temperature	Factor	Loss
Product	(pounds)	(gallons)	(by volume)	(gallons)	(lb/lbmol)	(psi)	(degree R)	(unitless)	(lb/1000gal)
Black Ink	11,416,598	1,359,119	63.02%	856,517	92.26	0.4630	531.34	1.45	1.4525
Blue Ink	9,932,863	1,201,072	61.85%	742,863	92.31	0.4608	531.34	1.45	1.4464
Red Ink	15,926,349	1,925,798	62.03%	1,194,572	92.31	0.4608	531.34	1.45	1.4464
Yellow Ink	46,194,209	5,738,411	68.69%	3,941,715	92.17	0.4663	531.34	1.45	1.4614
Extender	14,467,841	1,891,221	70.62%	1,335,580	92.31	0.4605	531.34	1.45	1.4454
Returned Solvent	1,301,667	180,112	100.00%	180,112	92.13	0.3082	517.49	1.45	0.9913

		por Components s same ratio as ir		:t)						
	( Nooding		Percent	Percent	Total Losses (lb/yr)					
	Percent	Percent	Ethyl-	Total			Ethyl-	Total	Total	
Product	Toluene	Xylene	Benzene	HAPs	Toluene	Xylene	Benzene	HAPs	VOC	
Black Ink	94.18%	2.48%	0.60%	97.26%	1171.66	30.85	7.46	1209.98	1244.07	
Blue Ink	93.89%	2.48%	0.63%	97.00%	1008.79	26.65	6.77	1042.21	1074.44	
Red Ink	93.30%	2.21%	0.77%	96.28%	1612.01	38.18	13.30	1663.50	1727.78	
Yellow Ink	94.98%	2.10%	0.69%	97.77%	5471.24	120.97	39.75	5631.96	5760.41	
Extender	95.07%	2.31%	0.77%	98.15%	1835.29	44.59	14.86	1894.75	1930.46	
Returned Solvent	100.00%	0.00%	0.00%	100.00%	178.55	0.00	0.00	178.55	178.55	
				Total	11,277.56	261.25	82.15	11,620.95	11,915.71	
				Total tons/vr	5.64	0.13	0.04	5.81	5.96	

# Appendix A: Emissions Calculations Page 14 of 16 TSD App A Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr) #1 and #2 Fuel Oil

Company Name: Flint Ink North America Corporation

Address, City IN Zip: 800 Industrial Blvd., New Albany, IN 47150-2290

Title V: 043-7305-00012

Reviewer: Phillip Ritz/EVP

Date: December 15, 1998

Heat Input Capacity Potential Throughput S = Weight % Sulfur

MMBtu/hr kgals/year 0.05

10 625.714286

		Maximum
Emission	Stack	Design Rating
Unit	ID.	(mmBtu/hr)
Boiler-2	B2	5.0
Boiler-1	B1	5.0

	Pollutant				
	PM*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	7.1	20.0	0.34	5.0
		(142.0S)			
Potential Emission in tons/yr	0.63	2.22	6.26	0.11	1.56

## Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 160,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 N

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98

\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

See page 2 for HAPs emission calculations.

# Appendix A: Emissions Calculations Page 15 of 16 TSD App A Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr) #1 and #2 Fuel Oil

#### #1 and #21 der On HAPs Emissions

Company Name: Flint Ink North America Corporation

Address, City IN Zip: 800 Industrial Blvd., New Albany, IN 47150-2290

Title V: 043-7305-00012

Reviewer: Phillip Ritz/EVP

Date: December 15, 1998

#### HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic	Beryllium	Cadmium	Chromium	Lead
	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	1.75E-04	1.31E-04	1.31E-04	1.31E-04	3.94E-04

## HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury	Manganese	Nickel	Selenium
	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	1.31E-04	2.63E-04	1.31E-04	6.57E-04

## Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

Page 16 of 16 TSD App A

Company Name: Flint Ink North America Corporation

Address, City 800 Industrial Blvd., New Albany, IN 47150-2290

Title V: 043-7305-00012
Reviewer: Phillip Ritz/EVP
Date: December 15, 1998

baghouse. Therefore, the uncontrolled emission rate is:

10,400 lbs/yr collected	6240 hours of operation/year		
0.95 % collection efficiency	33.33 pounds of PM generated/hour (uncontrolled)		
	0.026 pounds of PM -10 generated/hour (uncontrolled)		
	146.00 tons of PM generated/hour (uncontrolled)		
	0.11 tons of PM -10 generated/hour (uncontrolled)		
	7.30 tons of PM generated/hour (controlled)		
	0.11 tons of PM -10 generated/hour (controlled)		

#### Note:

Sieve analysis by the source on a dust sample determined that 0.78% was less than PM10.6 by weight.